Community Waterworks Public Education Written Material Template

Note that the PE written material must include all of the listed topic areas. The owner can insert his own language, subject to approval by the District Engineer, except for the language in blue text. This is mandatory language and must be included exactly as written

IMPORTANT INFORMATION ABOUT LEAD IN YOUR DRINKING WATER

[Insert name of water system] found elevated levels of lead in drinking water in some homes/buildings. Lead can cause serious health problems, especially for pregnant women and children 6 years and younger. Please read this notice closely to see what you can do to reduce lead in your drinking water.

This notice is brought to you by *[insert the name of your water system]*. State Water System ID# *[insert your water system's ID number]* Date *[Insert the date distributed]*

Health Effects of Lead

Lead can cause serious health problems if too much enters your body from drinking water or other sources. It can cause damage to the brain and kidneys, and can interfere with the production of red blood cells that carry oxygen to all parts of your body. The greatest risk of lead exposure is to infants, young children, and pregnant women. Scientists have linked the effects of lead on the brain with lowered IQ in children. Adults with kidney problems and high blood pressure can be affected by low levels of lead more than healthy adults. Lead is stored in the bones and it can be released later in life. During pregnancy, the child receives lead from the mother's bones, which may affect brain development.

Sources of Lead

Lead is a common metal found in the environment. Drinking water is one possible source of lead exposure. The main sources of lead exposure are lead-based paint and lead-contaminated dust or soil, and some plumbing materials. In addition, lead can be found in certain types of pottery, pewter, brass fixtures, food, and cosmetics. Other sources include exposure in the work place and exposure from certain hobbies (lead can be carried on clothing or shoes).

New brass faucets, fittings, and valves, including those advertised as "lead-free," may contribute lead to drinking water. The law currently allows end-use brass fixtures, such as faucets, with up to 8 percent lead to be labeled as "lead free." However, plumbing fixtures labeled National Sanitation Foundation (NSF) certified may only have up to 2 percent lead. Consumers should be aware of this when choosing fixtures and take appropriate precautions.

[Insert utility specific information describing your community's source water – e.g. "The source of water from XX Reservoir does not contain lead" or "Community XX does not have any lead in its source water or water mains in the street."] When water is in contact with pipes [or service lines] or plumbing that contains lead for several hours, the lead may enter drinking water. Homes built before 1986 are more likely to have plumbing containing lead. New homes may also have lead; even "lead-free" plumbing may contain some lead. EPA estimates that 10 to 20 percent of a person's potential exposure to lead may come from drinking water. Infants who consume mostly formula mixed with lead-containing water can receive 40 to 60 percent of their exposure to lead from drinking water.

Don't forget about other sources of lead such as lead paint, lead dust, and lead in soil. Wash your children's hands and toys often as they can come into contact with dirt and dust containing lead.

Steps You Can Take To Reduce Your Exposure to Lead in Your Water

1. ***Run your water to flush out lead.*** Run water for 15-30 seconds or until it becomes cold or reaches a steady temperature before using it for drinking or cooking, if it hasn't been used for several hours. This flushes lead-containing water from the pipes.

2. ***Use cold water for cooking and preparing baby formula.*** Do not cook with or drink water from the hot water tap; lead dissolves more easily into hot water. Do not use water from the hot water tap to make baby formula.

3. ***Do not boil water to remove lead.*** Boiling water will not reduce lead.

4. ***Look for alternative sources or treatment of water.*** You may want to consider purchasing bottled water or a water filter. Read the package to be sure the filter is approved to reduce lead or contact NSF International at 800-NSF-8010 or **www.nsf.org** for information on performance standards for water filters. Be sure to maintain and replace a filter device in accordance with the manufacturer's instructions to protect water quality.

5. ***Test your water for lead.*** Call us at *[insert phone number for your water system]* to find out how to get your water tested for lead. *[Include information on your water system's testing program. For example, do you provide free testing? Are there labs in your area that are certified to do lead in water testing?]*

6. ***Get your child tested.*** Contact your local health department or healthcare provider to find out how you can get your child tested for lead if you are concerned about exposure.

7. ***Identify if your plumbing fixtures contain lead.*** New brass faucets, fittings, and valves, including those advertised as "lead-free," may contribute lead to drinking water. The law currently allows end-use brass fixtures, such as faucets, with up to 8% lead to be labeled as "lead free." Visit the National Sanitation Foundation Web site at **www.nsf.org** to learn more about lead-containing plumbing fixtures.

What Happened? What is Being Done?

[Insert information about how and when the exceedance was discovered in your community and provide information on the source(s) of lead in the drinking water, if known.]

[Insert information about what your system is doing to reduce lead levels in homes in your community.]

[Insert information about the history of lead levels in tap water samples in your community. For example, have they declined substantially over time? Have they been low and risen recently? Is there a known reason for any lead level changes?]

For More Information

Call us at [*Insert Number*] or (if applicable) visit our Web site at [*insert Web site Here*]. For more information on reducing lead exposure around your home/building and the health effects of lead, visit EPA's Web site at **www.epa.gov/lead** or contact your health care provider.

Water Bill Language Insert Template

The following paragraph includes language that meets the LCR STR PE requirements and must be included in water bill notification in the event of a lead action level exceedance. Please note, the following statement may be placed directly on the water bill itself or included as an insert. A separate mailing may also be utilized. This alert must be included with every billing cycle or no less than quarterly for as long as the Action level is exceeded.

IMPORTANT INFORMATION ABOUT LEAD IN YOUR DRINKING WATER

[Insert name of your water system] found high levels of lead in drinking water in some homes. Lead can cause serious health problems. For more information, please call *[insert name and phone number of water system] or visit [insert your Web site].*

Web Site Announcement Template

Large community water systems (serving greater than 100,000 people) are **required** to provide a Public Education notice on their Web site. The following language can serve as an announcement on the Web site.

IMPORTANT INFORMATION ABOUT LEAD IN YOUR DRINKING WATER

[Insert name of your water system] found elevated levels of lead in drinking water in some homes/buildings in our community. Lead can cause serious health problems, especially for pregnant women and children 6 years and younger. Please read the following notice *[insert link to Public Education Notice]* closely to see what you can do to reduce lead in your drinking water and to learn what *[Insert name of your water system]* is doing to address this problem.

Call us at *[insert your water system phone number]* for more information

Date *[Insert the date posted]*

Press Release Template

The LCR STR **requires** community waterworks serving > 3,300 persons to provide two press releases per year during a lead exceedance. The following template contains information that is consistent with the LCR STR requirements. Providing local information, quotes from a local water system and/or public health official, and information about actions your system is taking to address the exceedance can help the media to accurately convey information about the exceedance and your system's action steps.

PRESS RELEASE DRINKING WATER NOTICE
IMPORTANT INFORMATION ABOUT LEAD IN [INSERT NAME OF YOUR COMMUNITY] DRINKING WATER

Recent drinking water quality monitoring conducted by *[insert name of water system/community]* has found elevated levels of lead in drinking water in some homes/buildings in *[insert name of community or area served by your water system]*. Although the primary sources of lead exposure are lead-based paint and lead-contaminated dust or soil, the U.S. Environmental Protection Agency estimates that 10 to 20 percent of a person's potential exposure to lead may come from drinking water.

[Insert name of community] is concerned about the health of their residents because lead can cause serious health problems if too much enters your body from drinking water or other sources, especially for pregnant women and children 6 years and younger. It can cause damage to the brain and kidneys, and can interfere with the production of red blood cells that carry oxygen to all parts of your body. Scientists have linked the effects of lead on the brain with lowered IQ in children. Adults with kidney problems and high blood pressure can be affected by low levels of lead more than healthy adults. Lead is stored in the bones and it can be released later in life. During pregnancy, the child receives lead from the mother's bones, which may affect brain development.

[Insert information about what happened and what is being done? You may wish to include information about the exceedance and the history of lead levels in tap water samples in your community. For example, have they declined substantially over time? Have they been low and risen recently? Is there a known reason for any lead level changes? Explain the steps being taken to reduce lead levels, such as corrosion control treatment and/or lead service line replacement.]

There are steps you can take to reduce your exposure to lead in your water:

Run your water to flush out lead. Run water for 15-30 seconds or until it becomes cold or reaches a steady temperature before using it for drinking or cooking, if it hasn't been used for several hours. This flushes lead-containing water from the pipes.

Use cold water for cooking and preparing baby formula.

Do not boil water to remove lead. Boiling water will not reduce lead.

Look for alternative drinking water sources or treatment of water. You may want to consider purchasing bottled water or a water filter.

Test your water for lead. Call us at *[insert phone number for your water system]* to find out how to get your water tested for lead.

Get your child tested. Contact your local health department or healthcare provider to find out how you can get your child tested for lead if you are concerned about exposure.

Identify if your plumbing fixtures contain lead.

There are several actions that *[insert name of water system of community]* are taking to address this lead in drinking water concern. *[Insert a quote from a water system official letting the public know what actions the system is taking to address the lead action level exceedance or insert a list of action steps.]*

Call *[insert name of your water system]* at *[insert number] or (if applicable) visit [insert name of your water system] Web site at [insert Web site Here]* to find out how to get your water tested for lead or for more information on steps *[insert name of your water system]* is taking to address the lead action level exceedance. For more information on reducing lead exposure around your home/building and the health effects of lead, visit EPA's Web site at **www.epa.gov/lead** or contact your health care provider.

Public Service Announcement Template

The LCR STR **does not require** water systems to produce Public Service Announcements. However, Public Service Announcements are one of the additional activities that large and small water systems can produce to meet the additional PE requirements. You should include the following information, which is consistent with the PE requirements under the LCR STR in any PSA.

IMPORTANT INFORMATION ABOUT LEAD IN YOUR DRINKING WATER

[Insert name of water system] found elevated levels of lead in drinking water in some homes/buildings in our community. Lead can cause serious health problems, especially for pregnant women and children 6 years and younger.

Lead is a common metal found in the environment. Drinking water is one possible source of lead exposure. The main sources of lead exposure are lead-based paint and lead-contaminated dust or soil. The following are some of the steps you can take to reduce your exposure to lead in your drinking water:

Run your water for 15 – 30 seconds to flush out lead.

Use cold water for cooking and preparing baby formula.

Do not boil water to remove lead as boiling does not reduce lead levels.

Look for alternative drinking water sources or treatment of water. You may want to consider purchasing bottled water or a water filter.

Test your Water for Lead. Call us at *[insert phone number for your water system]* to find out how to get your water tested.

Get your child tested. Contact your local heath department or healthcare provider to find out how you can get your child tested for lead if you are concerned about exposure.

Identify if your plumbing fixtures contain lead.

Call *[insert name of your water system]* at *[insert number] or (if applicable) visit our Web site at [insert Web site Here]* to find out how to get your water tested for lead or for more information. For more information on reducing lead exposure around your home/building and the health effects of lead, visit EPA's Web site at **www.epa.gov/lead** or contact your health care provider.

Local Health Department Notification Template

SUBJECT: *County/City*
Water – *Waterworks Name*

Date

District Medical Director
Address 1
Address 2
City, State, Zip

Dear Dr. *Medical Director:*

The *waterworks name* waterworks routinely monitors drinking water at consumer's taps for lead and copper. This monitoring is conducted in accordance with the Environmental Protection Agency's (EPA) Lead and Copper Rule and the Commonwealth of Virginia *Waterworks Regulations*.

Under the authority of the Safe Drinking Water Act, the EPA set the Action Level for lead in drinking water at 15 ppb. This means utilities must ensure that water from the customer's tap does not exceed this level in at least 90 percent of the homes sampled (90th percentile value). The Action Level is the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

The most recent results of our lead and copper monitoring indicate that the lead Action Level has been exceeded. The results of this most recent monitoring are summarized in the table below.

Insert name of waterworks **Waterworks: Lead & Copper Results**

[PRIVATE]Monitoring Period	Lead 90th Percentile (Action Level: 0.015 mg/L)	Copper 90th Percentile (Action Level: 1.3 mg/L)
Insert LCR monitoring period	*Insert lead 90th percentile* - Failed	*Insert copper 90th percentile* - Failed

Because the lead Action Level has been exceeded we are required to initiate a public education program that will alert our customers to the potential public health impacts of elevated lead in drinking water and provide information on ways to reduce exposure. A copy of the public education materials that are being sent to our customers is attached for your information.

We are requesting your assistance in distributing the public education materials to organizations that may serve "at-risk" customers of our waterworks. Such organizations may include WIC programs, Head Start programs, pediatricians, and others that may serve pregnant women and children.

If you have any questions please contact me at insert contact phone number.

Sincerely:

Insert Waterworks owner's Name

Public Education Completion Report –
Community Waterworks Serving > 3,300 Population

Public Education Delivery Certification

PWS Name: _____ PWSID: _____
Population: _____

DELIVERY METHOD – Community Waterworks Serving > 3,300 Population

☐ Written Public Education material regarding lead in drinking water was delivered to each bill paying customer on _____(date). This delivery was completed by:

- ☐ Inclusion in the regular water bill mailing
- ☐ Separate direct mailing to each bill paying customer

☐ Written Public Education material regarding lead in drinking water was delivered to the following organizations that are served by the waterworks on _____(date). A list of all organizations that were provided with the public education materials is attached.

- ☐ Public and private schools or school boards
- ☐ Public and private pre schools
- ☐ Women Infants and Children (WIC) and Head Start programs
- ☐ Public and private hospitals and medical clinics
- ☐ Obstetricians- Gynecologists and Midwives
- ☐ Pediatricians
- ☐ Family planning clinics
- ☐ Local welfare agencies
- ☐ Licensed childcare centers

☐ Written Public Education material regarding lead in drinking water was delivered to the _____ Local Health Department on _____ (date). The health department was also contacted:

- ☐ By personal visit on _____(date).
- ☐ By telephone on _____(date).

☐ Written Public Education material regarding lead in drinking water was delivered to all community based organizations indicated by the local health department on _____ (date).

☐ A press release was provided to newspapers, television stations, and radio stations on _____(date).

☐ The written Public Education material regarding lead in drinking water was posted on the waterworks web site on _____(date). This web posting will remain for as long as the lead Action Level is exceeded. [required for waterworks serving > 100,000 population].

☐ The following additional Public Education activities were initiated on _____ (date). At least three of the following must be completed.

- ☐ Public Service Announcements
- ☐ Paid advertisements
- ☐ Public area informational displays
- ☐ E-mails to customers
- ☐ Public meetings
- ☐ Household deliveries
- ☐ Targeted individual customer contacts
- ☐ Direct material distribution to all multi-family homes and institutions
- ☐ Other activities as approved by the state _____

I certify that all of the required Public Education delivery activities have been completed as indicated above. I further certify that an informational notice regarding lead in drinking water will be provided to each billing customer either with the normal water bills or as a separate mailing. This notification will be provided with each billing cycle but no less than once each calendar quarter for as long as the lead Action Level is exceeded.

Signature: _____ Print Name: _____

Job Title: _____ Phone: _____ Date: _____

___Complete this form.
___Attach a copy of the Public Education written materials
___Attach a copy of the Press Release delivered to newspaper, radio, and television stations
___Attach A list of all contacted organizations serving 'at risk" populations
___Within 10 days after Public Education delivery has been completed, mail this form and attachments to:

District Engineer
VDH - Office of Drinking Water
_____ Field Office
_____
_____ VA _____

LEAD & COPPER RULE PUBLIC EDUCATION TEMPLATES AND DELIVERY REQUIREMENTS

For Community Water Systems serving ≤ 3,300 people

The following templates can be used to satisfy the public education requirements of the Lead & Copper Rule, including the 2007 Short-Term Revisions.

Prepared and Distributed by the Vermont Water Supply Division, Department of Environmental Conservation

Revised 1/10/2011

ED_004030_00013912-00001

Included in this document are the following lead public education templates:

For questions or comments regarding this document please contact:

State of Vermont
Department of Environmental Conservation
Water Supply Division
103 South Main Street
Waterbury, VT 05671-0403

Attention: Lead & Copper Rule Administrator

This document can be downloaded as a modifiable digital document at the Vermont Water Supply Division Web site found at:
[HYPERLINK "http://www.anr.state.vt.us/dec/watersup/wsd.htm"]

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Summary:

The 2007 revisions to the Lead and Copper Rule (LCR) went into effect on December 10, 2009. The revisions include three new or revised requirements to inform the public:

- Public education following lead action level exceedances.
- Consumer notification of lead tap water results.
- Consumer confidence report lead informational statement.

This document provides a summary of the revised public education requirements and lead public education templates.

Summary Tables – Revised Public Education Requirements

The following tables describe the revised Public Education (PE) requirements under the 2007 short-term revisions and clarifications to the Lead and Copper Rule (LCR).

Changes in the Public Education Requirements Resulting from the Lead and Copper Rule Short-term Revisions and Clarifications	
Revisions:	**Applies to:**
Content of Materials	
Must alter language of previous public education according to the new text.	All water systems
May use personalized language to discuss sources of lead and steps to reduce lead in drinking water (previously pre-written text was required. Systems are now able to develop own text within the guidelines that is applicable to local situation).	All water systems
Must include language explaining what happened and what is being done.	All water systems
Must include language providing contacts for more information.	All water systems
Must include language explaining how to get water tested and lead in plumbing components (low lead vs. lead free).	CWSs
Delivery of Public Education Materials	
Must deliver printed materials meeting the content requirements to all bill paying customers within 60 days after the end of the monitoring period in which the exceedance occurred.	CWSs
Must, no less than quarterly, provide information on or in each water bill as long as the system exceeds the action level for lead after the end of the monitoring period in which the exceedance occurred.* The message on the water bill must include the following statement as written: "[Insert name of water system] found high levels of lead in drinking water in some homes. Lead can cause serious health problems. For more information please call [insert name of water system] of visit [insert your Web site here.]	CWSs
Must continue to include information in water utility bill every billing cycle while still in exceedance of lead action level.	CWSs
Must make a good-faith effort within 60 days after the end of the monitoring period in which the exceedance occurred to contact customers most at risk by delivering materials to the contact list of organizations with an informational notice encouraging them to pass the information along.	CWSs

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Must deliver materials that meet content requirements to local public health agency and directly contact the agencies within 60 days after the end of the monitoring period in which the exceedance occurred.	CWSs
Must post material to water system's Web site within 60 days after the end of the monitoring period in which the exceedance occurred.	CWSs serving a population greater than 100,000
Must submit press release to newspaper, television, and radio stations within 60 days after the end of the monitoring period in which the exceedance occurred.	CWSs
Must repeat submission of press releases twice every 12 months while still in exceedance of lead action level.	CWSs
Must implement additional activities from one or more of the categories listed within 60 days after the end of the period in which the exceedance occurred (See Tables below).	CWSs
May distribute notices to every household served by system in place of providing organizations with information to provide to their members.	CWSs serving 3,300 or fewer people (previously for CWSs serving between 501 and 3,300 people)
Must repeat delivering printed materials, good-faith efforts, and outreach activities every 12 months while still in exceedance of lead action level.	CWSs
May receive extension from State on 60 day requirement if needed for implementation purposed.	CWSs
End of the monitoring period is September 30 of the calendar year in which sampling occurs, or, if the State has established an alternate monitoring period, the last day of that period.	All water systems that are required to conduct monitoring annually or less frequently

**Note: The message or delivery mechanism can be modified in consultation with the state. Specifically, the state may allow a separate mailing of PE materials to customers if the water system cannot place information on the water bills.*

Required Methods of Delivery for Small (<3,300 customers) Community Water Systems	
Requirement	**Timing[1]**
Deliver printed materials (pamphlets, brochures, posters) to all bill paying customers	Within 60 days after the end of the monitoring period in which the exceedance occurred and repeating once every 12 months.
Deliver public education materials to the following facilities and organizations that are served by the system that are most likely to be visited regularly by pregnant women and children:[2] 1. Local public health agencies[3] 2. Public and private schools or school boards 3. Women Infants and Children (WIC) and Head Start programs 4. Public and private hospitals and medical clinics 5. Pediatricians 6. Family planning clinics 7. Local welfare agencies	
Make a good faith effort to locate the following organizations within the service area and deliver materials that meet the content requirements, along with an informational notice that encourages distribution to all potentially affected customers or users. The good faith effort to contact at-risk customers may include requesting a specific contact list of the organizations from the local public health agencies, even if the agencies are not located within the water system service area:[4] • Licensed childcare centers • Public and private preschools • Obstetricians-Gynecologists and Midwives	Within 60 days after the end of the monitoring period in which the exceedance occurred and repeating once every 12 months

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Provide information on or in each water bill (no less than quarterly or state can approve a separate mailing)[5,6]	Each billing cycle for as long as the system exceeds the lead action level
Submit press release to newspaper, television, and radio stations[7]	Within 60 days after the end of the monitoring period in which the exceedance occurred and repeating once every 12 months
Implement additional Public Education activities[8]	Within 60 days after the end of the monitoring period in which the exceedance occurred and repeating once every 12 months

1 State can allow activities to extend beyond the 60-day requirement if needed for implementation purposes; however, this extension must be approved in writing in advance of the 60-day deadline.
2 To obtain a list of organizations in your area, contact your local public health agency or see the document entitled, "Implementing the Lead & Copper Rule Minor Revisions: Partnering with the public health community".
3 Systems are required to contact their Local Public Health Agencies directly (either in person or by phone).
4For further clarification of a good faith effort, systems should consult with their primacy agency.
5 State may allow a separate mailing if the water system cannot place information on the water bill.
6 Systems may add additional pages (e.g., public education brochure) to the Consumer Confidence Report if timing is appropriate. However, it may be rare that timing will coincide, given that the CCR must contain compliance data collected in the previous calendar year and the report must be provided to consumers no later than July 1 (i.e., the report issued by July 1, 2007 contains compliance data collected in calendar year 2006).
7 State may waive this requirement as long as the system distributes notices to every household served by the system.
8 See Table below for a listing of the additional required activities for small systems.

In addition to the activities described previously that are required for all community water systems, there are requirements that affect water systems depending on their size. Small systems (serving <3,300 individuals) are required to conduct one (1) additional activity listed in the table below. Large systems (serving >3,300 individuals) are required to conduct three (3) activities from one, two, or three of the general categories listed in the table below. Systems should verify with their primary agency to ensure fulfillment of all requirements.

Required Methods of Delivery for Community Water Systems to Choose From[1]	
Categories	**Example Activities**
Public Service Announcements	Radio and Television PSAs
Paid Advertisements	Newspaper, transit, or movie theater ads
Display Information in Public Areas	Community and health centers Local sporting events Grocery stores Laundromat bulletin boards Libraries Faith-based organizations Community listservs Utility Web site (for small systems serving < 3,300)[2] Post on local government Web sites
E-mail to Customers	
Public Meetings	Town hall meetings PTA meetings
Delivery to Every Household	Doorknob hangers, mailing to all consumers
Individual Contact with Customers (targeted contact)	Phone trees Calls to individual consumers/households Targeted mailings to at-risk populations
Provide Materials Directly to Multi-family Housing	Posters, flyers
Other Methods Approved by the State	

1 This document contains customizable templates for PE materials that may be used to meet these requirements.
2 Large Systems must conduct this activity (see Table 3).

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General Public Education Notice Template

The following language meets the revised PE requirements under the 2007 short-term revisions and clarifications to the Lead and Copper Rule (LCR). **Your notice must include the topic areas in bold**. Anything in italics under each topic area is required language and cannot be changed while anything in regular text must be covered, but you may use either the suggested language or your own words to cover the subject.

Your notice must begin with the following opening statement (though you have the option to include a title of the pamphlet or brochure of your choosing):

IMPORTANT INFORMATION ABOUT LEAD IN YOUR DRINKING WATER

[Insert name of water system] found elevated levels of lead in drinking water in some homes/buildings. Lead can cause serious health problems, especially for pregnant women and children 6 years and younger. Please read this notice closely to see what you can do to reduce lead in your drinking water.

This notice is brought to you by [insert the name of your water system].
State Water System ID# [insert your water system's WSID number]
Date [insert the date distributed]

Health Effects of Lead

Lead can cause serious health problems if too much enters your body from drinking water or other sources. It can cause damage to the brain and kidneys, and can interfere with the production of red blood cells that carry oxygen to all parts of your body. The greatest risk of lead exposure is to infants, young children, and pregnant women. Scientists have linked the effects of lead on the brain with lowered IQ in children. Adults with kidney problems and high blood pressure can be affected by low levels of lead more than healthy adults. Lead is stored in the bones and it can be released later in life. During pregnancy, the child receives lead from the mother's bones, which may affect brain development.

Sources of Lead

Lead is a common metal found in the environment. Drinking water is one possible source of lead exposure. The main sources of lead exposure are lead-based paint and lead-contaminated dust or soil, and some plumbing materials. In addition, lead can be found in certain types of pottery, pewter, brass fixtures, food, and cosmetics. Other sources include exposure in the work place and exposure from certain hobbies (lead can be carried on clothing or shoes).

New brass faucets, fittings, and valves, including those advertised as "lead-free," may contribute lead to drinking water. The law currently allows end-use brass fixtures, such as faucets, with up to 8 percent lead to be labeled as "lead free." However, plumbing fixtures labeled National Sanitation Foundation (NSF) certified may only have up to 2 percent lead. Consumers should be aware of this when choosing fixtures and take appropriate precautions.

[Insert utility specific information describing your community's source water – e.g. "The source of water from XX Reservoir does not contain lead" or "Community X does not have any lead in its source water or water mains in the street."] When water is in contact with pipes [or service lines] or plumbing that contains lead for several hours, the

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lead may enter drinking water. Homes built before 1986 are more likely to have plumbing containing lead. New homes may also have lead; even "lead-free" plumbing may contain some lead.

EPA estimates that 10 to 20 percent of a person's potential exposure to lead may come from drinking water. Infants who consume mostly formula mixed with lead-containing water can receive 40 to 60 percent of their exposure to lead from drinking water.

Don't forget about other sources of lead such as lead paint, lead dust, and lead in soil. Wash your children's hands and toys often as they can come into contact with dirt and dust containing lead.

Steps You Can Take To Reduce Your Exposure To Lead In Your Water

1. ***Run your water to flush out lead.*** Run water for 15-30 seconds [or insert a different flushing time if your system has representative data indicating a different flushing time would better reduce lead exposure in your community and if the State Primacy Agency approves the wording] or until it becomes cold or reaches a steady temperature before using it for drinking or cooking, if it hasn't been used for several hours. This flushes lead-containing water from the pipes.
2. ***Use cold water for cooking and preparing baby formula.*** Do not cook with or drink water from the hot water tap; lead dissolves more easily into hot water. Do not use water from the hot water tap to make baby formula.
3. ***Do not boil water to remove lead.*** Boiling water will not reduce lead.
4. ***Look for alternative sources or treatment of water.*** You may want to consider purchasing bottled water or a water filter. Read the package to be sure the filter is approved to reduce lead or contact NSF International at 800-NSF-8010 or **www.nsf.org** for information on performance standards for water filters. Be sure to maintain and replace a filter device in accordance with the manufacturer's instructions to protect water quality.
5. ***Test your water for lead.*** Call us at [insert phone number for your water system] to find out how to get your water tested for lead. [Include information on your water system's testing program. For example, do you provide free testing? Are there labs in your area that are certified to do lead in water testing?]
6. ***Get your child tested.*** Contact your local health department or healthcare provider to find out how you can get your child tested for lead if you are concerned about exposure.
7. ***Identify if your plumbing fixtures contain lead.*** New brass faucets, fittings, and valves, including those advertised as "lead-free," may contribute lead to drinking water. The law currently allows end-use brass fixtures, such as faucets, with up to 8% lead to be labeled as "lead free." Visit the National Sanitation Foundation Web site at **www.nsf.org** to learn more about lead-containing plumbing fixtures.

What Happened? What is Being Done?

- [Insert information about how and when the exceedance was discovered in your community and provide information on the source(s) of lead in the drinking water, if known.]
- [Insert information about what your system is doing to reduce lead levels in homes in your community.]
- [Insert information about lead service lines in your community, how a consumer can find out of they have a lead service line, what your water system is doing to replace lead service lines, etc.]
- [Insert information about the history of lead levels in tap water samples in your community. For example, have they declined substantially over time? Have they been low and risen recently? Is there a known reason for any lead level changes?]

For More Information

Call us at [insert phone number] or (if applicable) *visit our Web site at* [insert Web site here]. *For more information on reducing lead exposure around your home/building and the health effects of lead, visit EPA's Web site at* ***www.epa.gov/lead*** *or contact your health care provider.*

ListServ/E-mail Announcement Template

Many communities, neighborhood councils, and conduit organizations serving specific audiences in your community maintain listservs or electronic bulletin boards where information important to the community can be posted. The following language meets the revised PE requirements under the 2007 short-term revisions and clarifications to the Lead and Copper Rule (LCR). **Your announcement must include the topic areas in bold**. Anything in italics under each topic area is required language and cannot be changed while anything in regular text must be covered, but you may use either the suggested language or your own words to cover the subject. (On following page)

IMPORTANT INFORMATION ABOUT LEAD IN YOUR DRINKING WATER

[Insert name of water system] found elevated levels of lead in drinking water in some homes/buildings. Lead can cause serious health problems, especially for pregnant women and children 6 years and younger. Please read this notice closely to see what you can do to reduce lead in your drinking water.

This notice is brought to you by [insert the name of your water system].
State Water System ID# [insert your water system's WSID number]
Date [insert the date distributed]

Health Effects of Lead
Lead can cause serious health problems if too much enters your body from drinking water or other sources. It can cause damage to the brain and kidneys, and can interfere with the production of red blood cells that carry oxygen to all parts of your body. The greatest risk of lead exposure is to infants, young children, and pregnant women. Scientists have linked the effects of lead on the brain with lowered IQ in children. Adults with kidney problems and high blood pressure can be affected by low levels of lead more than healthy adults. Lead is stored in the bones and it can be released later in life. During pregnancy, the child receives lead from the mother's bones, which may affect brain development.

Sources of Lead
Lead is a common metal found in the environment. Drinking water is one possible source of lead exposure. The main sources of lead exposure are lead-based paint and lead-contaminated dust or soil, and some plumbing materials. In addition, lead can be found in certain types of pottery, pewter, brass fixtures, food, and cosmetics. Other sources include exposure in the work place and exposure from certain hobbies (lead can be carried on clothing or shoes).

New brass faucets, fittings, and valves, including those advertised as "lead-free," may contribute lead to drinking water. The law currently allows end-use brass fixtures, such as faucets, with up to 8 percent lead to be labeled as "lead free." However, plumbing fixtures labeled National Sanitation Foundation (NSF) certified may only have up to 2 percent lead. Consumers should be aware of this when choosing fixtures and take appropriate precautions.

[Insert utility specific information describing your community's source water – e.g. "The source of water from XX Reservoir does not contain lead" or "Community X does not have any lead in its source water or water mains in the street."] When water is in contact with pipes [or service lines], and plumbing containing lead for several hours, the

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lead may enter drinking water. Homes built before 1986 are more likely to have plumbing containing lead. New homes may also have lead; even "lead-free" plumbing may contain some lead.

EPA estimates that 10 to 20 percent of a person's potential exposure to lead may come from drinking water. Infants who consume mostly formula mixed with lead-containing water can receive 40 to 60 percent of their exposure to lead from drinking water.

Don't forget about other sources of lead such as lead paint, lead dust, and lead in soil. Wash your children's hands and toys often as they can come into contact with dirt and dust containing lead.

Steps you can take to reduce your exposure to lead in your water

- ***Run your water to flush out lead.*** Run water for 15-30 seconds [or insert a different flushing time if your system has representative data indicating a different flushing time would better reduce lead exposure in your community and if the State Primacy Agency approves the wording] or until it becomes cold or reaches a steady temperature before using it for drinking or cooking, if it hasn't been used for several hours. This flushes lead-containing water from the pipes.
- ***Use cold water for cooking and preparing baby formula.*** Do not cook with or drink water from the hot water tap; lead dissolves more easily into hot water. Do not use water from the hot water tap to make baby formula.
- ***Do not boil water to remove lead.*** Boiling water will not reduce lead.
- ***Look for alternative sources or treatment of water.*** You may want to consider purchasing bottled water or a water filter. Read the package to be sure the filter is approved to reduce lead or contact NSF International at 800-NSF-8010 or **www.nsf.org** for information on performance standards for water filters. Be sure to maintain and replace a filter device in accordance with the manufacturer's instructions to protect water quality.
- ***Test your water for lead.*** Call us at [insert phone number for your water system] to find out how to get your water tested for lead if you are concerned about exposure.
- ***Get your child tested.*** Contact your community public health office or healthcare provider to find out how you can get your child tested for lead if you are concerned about exposure.
- ***Identify if your plumbing fixtures contain lead.*** New brass faucets, fittings, and valves, including those advertised as "lead-free," may contribute lead to drinking water. The law currently allows end-use brass fixtures, such as faucets, with up to 8% lead to be labeled as "lead free." However, plumbing fixtures labeled National Sanitation Foundation (NSF) certified may only have up to 2% lead. Consumers should be aware of this when choosing fixtures and take appropriate precautions.

What Happened? What is Being Done?

- [Insert information about how and when the exceedance was discovered in your community and provide information on the source(s) of lead in the drinking water, if known.]
- [Insert information about what your system is doing to reduce lead levels in homes in your community.]
- [Insert information about lead service lines in your community, how a consumer can find out of they have a lead service line, what your water system is doing to replace lead service lines, etc.]
- [Insert information about the history of lead levels in tap water samples in your community. For example, have they declined substantially over time? Have they been low and risen recently? Is there a known reason for any lead level changes?]

For More Information

Call us at [insert phone number] or (if applicable) *visit our Web site at* [insert Web site here]. *For more information on reducing lead exposure around your home/building and the health effects of lead, visit EPA's Web site at w**ww.epa.gov/lead** or contact your health care provider.*

Web Site Announcement Template

Large community water systems (serving greater than 100,000 people) are **required** to provide a Public Education notice on their Web site. The following language can serve as an announcement on the Web site, but to meet the revised PE requirements under the 2007 short-term revisions and clarifications to the Lead and Copper Rule (LCR), large CWSs should include a link to their General Public Education Notice, which includes all of the required language.

IMPORTANT INFORMATION ABOUT LEAD IN YOUR DRINKING WATER

[Insert name of your water system] found elevated levels of lead in drinking water in some homes/ buildings in our community. Lead can cause serious health problems, especially for pregnant women and children 6 years and younger. Please read the following notice [insert link to Public Education Notice] closely to see what you can do to reduce lead in your drinking water and to learn what [Insert name of your water system] is doing to address this problem.

Call us at [insert your water system phone number] for more information Date [insert the date posted]

[Provide your system's General Public Education Notice here or link to it within your Web site.]

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Public Service Announcement Template

The latest revisions to the LCR do not require water systems to produce Public Service Announcements. However, Public Service Announcements are one of the additional activities that large and small water systems can produce to meet the additional PE requirements. Although you should include the following information, which is consistent with the PE requirements under the 2007 short-term revisions and clarifications to the Lead and Copper Rule (LCR), the media outlets may opt to not include all of the information. Note: Mandatory language which must be included as written is in italics. (On following page)

IMPORTANT INFORMATION ABOUT LEAD IN YOUR DRINKING WATER

[Insert name of water system] found elevated levels of lead in drinking water in some homes/buildings in our community. Lead can cause serious health problems, especially for pregnant women and children 6 years and younger.

Lead is a common metal found in the environment. Drinking water is one possible source of lead exposure. The main sources of lead exposure are lead-based paint and lead-contaminated dust or soil.

The following are some of the steps you can take to reduce your exposure to lead in your water including:

- **Run your water for 15 – 30 seconds to flush out lead.** [Or insert a different flushing time if your system has representative data indicating a different flushing time would better reduce lead exposure in your community and if the Primacy Agency approves the wording]
- **Use cold water for cooking and preparing baby formula.**
- **Do not boil water to remove lead.**

Call [insert name of your water system] at [insert phone number] or (if applicable) visit our Web site at [insert Web site here] to find out how to get your water tested for lead or for more information. For more information on reducing lead exposure around your home/building and the health effects of lead, visit EPA's Web site at ***www.epa.gov/lead*** *or contact your health care provider.*

This notice is brought to you by [insert the name of your water system]. State Water System ID# [insert your water system's WSID number] Date [insert the date distributed]

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Press Release Template

The revisions to the LCR PE **require** systems to provide two press releases per year during a lead action level exceedance. For small systems, if no media outlets are available that serve the population served by the system, the Primacy Agency can waive this requirement. The following template contains information that is consistent with the LCR requirements. Providing local information, quotes from a local water system and/ or public health official, and information about actions your system is taking to address the exceedance can help the media to accurately convey information about the exceedance and your system's action steps. Please note, media outlets may choose not to include all of the information that you provide in your Press Release. (On following page)

Note: Mandatory language which must be included as written is in italics.

PRESS RELEASE DRINKING WATER NOTICE **[Insert Date of Intended Release]**

IMPORTANT INFORMATION ABOUT LEAD IN [INSERT NAME OF YOUR COMMUNITY] DRINKING WATER

Recent drinking water quality monitoring conducted by *[insert name of water system/community] has found elevated levels of lead in drinking water in some homes/buildings in* [insert name of community or area served by your water system]. Although the primary sources of lead exposure are lead-based paint and lead-contaminated dust or soil, the U.S. Environmental Protection Agency estimates that 10 to 20 percent of a person's potential exposure to lead may come from drinking water.

[Insert name of community] is concerned about the health of their residents because *lead can cause serious health problems if too much enters your body from drinking water or other sources, especially for pregnant women and children 6 years and younger. It can cause damage to the brain and kidneys, and can interfere with the production of red blood cells that carry oxygen to all parts of your body. Scientists have linked the effects of lead on the brain with lowered IQ in children. Adults with kidney problems and high blood pressure can be affected by low levels of lead more than healthy adults. Lead is stored in the bones and it can be released later in life. During pregnancy, the child receives lead from the mother's bones, which may affect brain development.*

[Insert information about what happened and what is being done? You may wish to include information about the exceedance and the history of lead levels in tap water samples in your community. For example, have they declined substantially over time? Have they been low and risen recently? Is there a known reason for any lead level changes? Explain the steps being taken to reduce lead levels, such as corrosion control treatment and/or lead service line replacement.]

There are steps you can take to reduce your exposure to lead in your water:

- **Run your water to flush out lead.** Run water for 15-30 seconds or until it becomes cold or reaches a steady temperature before using it for drinking or cooking, if it hasn't been used for several hours. This flushes lead-containing water from the pipes.
- **Use cold water for cooking and preparing baby formula.**
- **Do not boil water to remove lead.** Boiling water will not reduce lead.

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- **Look for alternative drinking water sources or treatment of water.** You may want to consider purchasing bottled water or a water filter.
- **Test your water for lead.** Call us at [insert phone number for your water system] to find out how to get your water tested for lead.
- **Get your child tested.** Contact your Community Public Health Office or healthcare provider to find out how you can get your child tested for lead if you are concerned about exposure.
- **Identify if your plumbing fixtures contain lead.**

There are several actions that [insert name of water system of community] are taking to address this lead in drinking water concern. [Insert a quote from a water system official letting the public know what actions the system is taking to address the lead action level exceedance or insert a list of action steps.]

Call [insert name of your water system] at [insert phone number] or (if applicable) visit [insert name of your water system] Web site at [insert Web site here] to find out how to get your water tested for lead or for more information on steps [insert name of your water system] is taking to address the lead action level exceedance. For more information on reducing lead exposure around your home/building and the health effects of lead, visit EPA's Web site at **www.epa.gov/lead** *or contact your health care provider.*

Water Bill Language/Insert Template

The following paragraph includes language that meets the LCR PE requirements and must be included in water bill notification in the event of a lead action level exceedance. Please note, the following statement may be placed directly on the water bill itself or included as an insert.

IMPORTANT INFORMATION ABOUT LEAD IN YOUR DRINKING WATER

[Insert name of your water system] found high levels of lead in drinking water in some homes. Lead can cause serious health problems. For more information, please call [insert name and phone number of water system] or visit [insert URL for your Web site].

Local Health Official Notification Template

SUBJECT: *Elevated Lead levels in drinking water in [insert community or communities] Community Water System Name and WSID#*
DATE: *Date*

Medical Director
Address 1
Address 2
City, State, Zip

Dear Dr. *Medical Director:*

The *community water system name* routinely monitors drinking water at consumer's taps for lead and copper. This monitoring is conducted in accordance with the Environmental Protection Agency's (EPA) Lead and Copper Rule and the State of Vermont *Drinking Water Regulations*.

Under the authority of the Safe Drinking Water Act, the EPA set the Action Level for lead in drinking water at 15 ppb (0.015 mg/L). This means utilities must ensure that water from the customer's tap does not exceed this level in at least 90 percent of the homes sampled (90th percentile value). The Action Level is the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

The most recent results of our lead and copper monitoring indicate that the lead Action Level has been exceeded. The results of this most recent monitoring are summarized in the table below.

***Insert name of community water system*: 90th Percentile Lead & Copper Results**

[PRIVATE]Monitoring Period	Lead 90th Percentile (Action Level: 0.015 mg/L or 15 ppb)	Copper 90th Percentile (Action Level: 1.3 mg/L or 1300 ppb)
Insert LCR monitoring period	*Insert lead 90th percentile* - Failed	*Insert copper 90th percentile* – (Passed or Failed)

Because the lead Action Level has been exceeded we are required to initiate a public education program that will alert our customers to the potential public health impacts of elevated lead in drinking water and provide information on ways to reduce exposure. A copy of the public education materials that are being sent to our customers is attached for your information.

We are requesting your assistance in distributing the public education materials to organizations that may serve "at-risk" customers of our community water system. Such organizations may include WIC programs, Head Start programs, pediatricians, and others that may serve pregnant women and children.

If you have any questions please contact me at [*insert contact phone number*].

Sincerely,
Insert community water system owner's Name

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Public Education Brochure

replace a filter device in accordance with the manufacturer's instructions to protect water quality.

5. *Test your water for lead.* Call us at [insert phone number for your water system] to find out how to get your water tested for lead. [Include information on your water system's testing program. For example, do you provide free testing? Are there labs in your area that are certified to do lead in water testing?]

6. *Get your child tested.* Contact your local health department or healthcare provider to find out how you can get your child tested for lead, if you are concerned about exposure.

7. *Identify if your plumbing fixtures contain lead.* New brass faucets, fittings, and valves, including those advertised as "lead-free," may contribute lead to drinking water. The law currently allows end-use brass fixtures, such as faucets, with up to 8% lead to be labeled as "lead free." However, plumbing fixtures labeled National Sanitation Foundation (NSF) certified may only have up to 2% lead. Consumers should be aware of this when choosing fixtures and take appropriate precautions.

WHAT HAPPENED? WHAT IS BEING DONE?

[Insert information about how and when the exceedance was discovered in your community and provide information on the source(s) of lead in the drinking water, if known.]

[Insert information about what your system is doing to reduce lead levels in homes in your community.]

[Insert information about lead service lines in your community, how a consumer can find out if they have a lead service line, what your water system is doing to replace lead service lines, etc.]

[Insert information about the history of lead levels in tap water samples in your community. For example, have they declined substantially over time? Have they been low and risen recently? Is there a known reason for any lead level changes?]

FOR MORE INFORMATION

Call us at [Insert Number] or (if applicable) visit our Web site at [insert Web site Here]. For more information on reducing lead exposure around your home/building and the health effects of lead, visit EPA's Web site at www.epa.gov/lead, or contact your health care provider.

[We recommend you include the name of your system and the date that the information is being distributed, along with the state water system ID, somewhere on the notice.]

Lead in Drinking Water

[You may add your logo here.]

The United States Environmental Protection Agency (EPA) and **[insert name of water supplier here]** are concerned about lead in your drinking water. Although most homes have very low levels of lead in their drinking water, some homes in the community have lead levels above the EPA action level of 15 parts per billion (ppb), or 0.015 milligrams of lead per liter of water (mg/L). Under Federal law we are required to have a program in place to minimize lead in your drinking water by **[insert date when corrosion control will be completed for your system]**.

This program includes:

1. Corrosion control treatment (treating the water to make it less likely that lead will dissolve into the water);

2. Source water treatment (removing any lead that is in the water at the time it leaves our treatment facility); and

3. A public education program.

We are also required to replace the portion of each lead service line that we own if the line contributes lead concentrations of more than 15 ppb after we have completed the comprehensive treatment program. If you have any questions about how we are carrying out the requirements of the lead regulation please give us a call at **[insert water system's phone number here]**.

This brochure also explains the simple steps you can take to protect yourself by reducing your exposure to lead in drinking water.

Important Information about Lead in Your Drinking Water

[Insert name of water system] found elevated levels of lead in drinking water in some homes/buildings. Lead can cause serious health problems, especially for pregnant women and young children. Please read this information closely to see what you can do to reduce lead in your drinking water.

HEALTH EFFECTS OF LEAD

Lead can cause serious health problems if too much enters your body from drinking water or other sources. It can cause damage to the brain and kidneys, and can interfere with the production of red blood cells that carry oxygen to all parts of your body. The greatest risk of lead exposure is to infants, young children, and pregnant women. Scientists have linked the effects of lead on the brain with lowered IQ in children. Adults with kidney problems and high blood pressure can be affected by low levels of lead more than healthy adults. Lead is stored in the bones and it can be released later in life. During pregnancy, the child receives lead from the mother's bones, which may affect brain development.

SOURCES OF LEAD

Lead is a common metal found in the environment. Drinking water is one possible source of lead exposure. The main sources of lead exposure are lead-based paint and lead-contaminated dust or soil, and some plumbing materials. In addition, lead can be found in certain types of pottery, pewter, brass fixtures, food, and cosmetics. Other sources include exposure in the work place and exposure from certain hobbies (lead can be carried on clothing or shoes).

New brass faucets, fittings, and valves, including those advertised as "lead-free," may contribute lead to drinking water. The law currently allows end-use brass fixtures, such as faucets, with up to 8 percent lead to be labeled as "lead free." However, plumbing fixtures labeled National Sanitation Foundation (NSF) certified may only have up to 2 percent lead. Consumers should be aware of this when choosing fixtures and take appropriate precautions.

[CWS – Insert utility specific information describing your community's source water – e.g. "The source of water from XX Reservoir does not contain lead" or "Community X does not have any lead in its source water or water mains in the street."] When water is in contact with pipes [or service lines], and plumbing containing lead for several hours, the lead may enter drinking water. Homes built before 1986 are more likely to have plumbing containing lead. New homes may also have lead, even "lead-free" plumbing may contain some lead.

EPA estimates that 10 to 20 percent of a person's potential exposure to lead may come from drinking water. Infants who consume mostly formula mixed with lead-containing water can receive 40 to 60 percent of their exposure to lead from drinking water.
Don't forget about other sources of lead such as lead paint, lead dust, and lead in soil. Wash your children's hands and toys often as they can come into contact with dirt and dust containing lead.

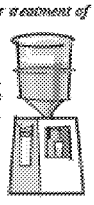
STEPS YOU CAN TAKE TO REDUCE YOUR EXPOSURE TO LEAD IN YOUR WATER

1. *Run your water to flush out lead.* Run water for 15-30 seconds [or insert a different flushing time if your system has representative data indicating a different flushing time would better reduce lead exposure in your community and if the State Primacy Agency approves the wording] or until it becomes cold or reaches a steady temperature before using it for drinking or cooking, if it hasn't been used for several hours. This flushes lead-containing water from the pipes.

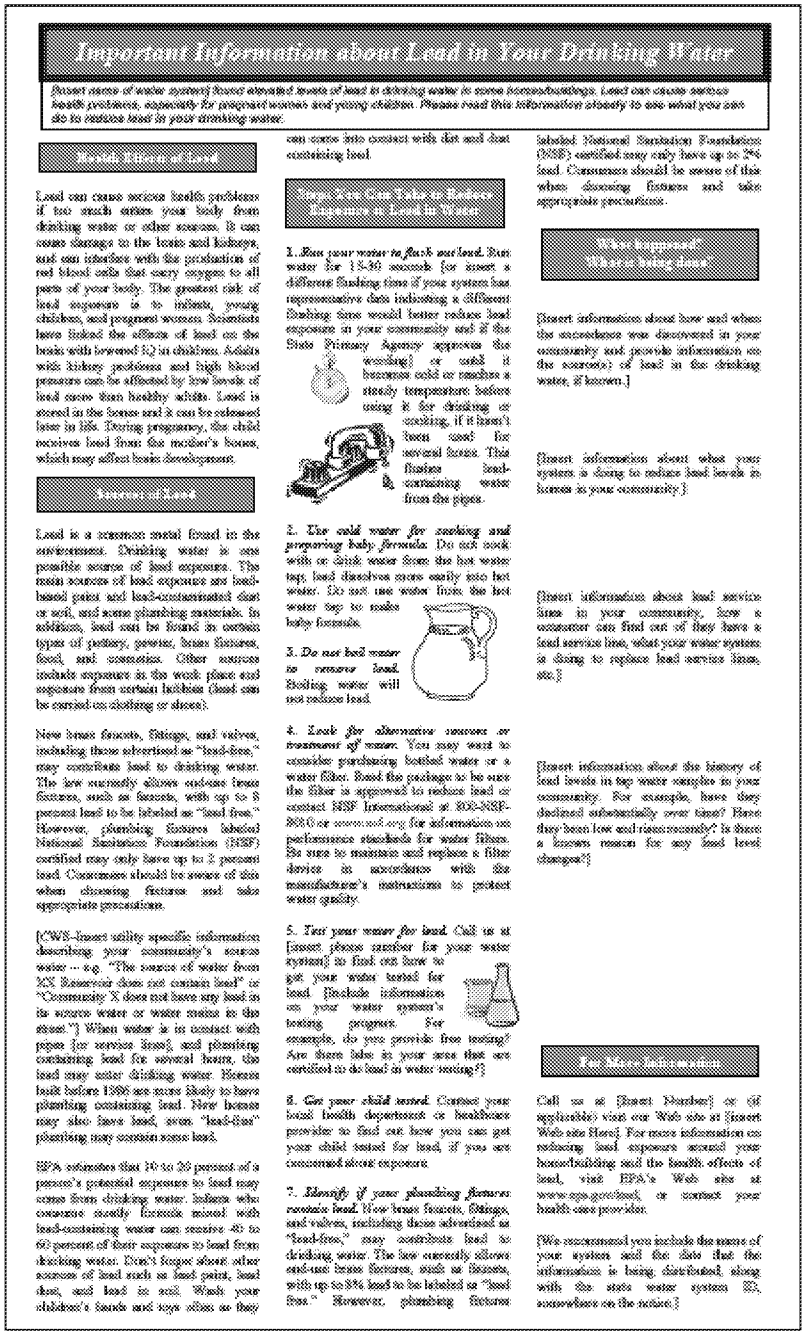
2. *Use cold water for cooking and preparing baby formula.* Do not cook with or drink water from the hot water tap; lead dissolves more easily into hot water. Do not use water from the hot water tap to make baby formula.

3. *Do not boil water to remove lead.* Boiling water will not reduce lead.

4. *Look for alternative sources or treatment of water.* You may want to consider purchasing bottled water or a water filter. Read the package to be sure the filter is approved to reduce lead or contact NSF International at 800-NSF-8010 or www.nsf.org for information on performance standards for water filters. Be sure to maintain and



Public Education Poster



Important Information about Lead in Your Drinking Water

[Insert name of water system] found elevated levels of lead in drinking water in some homes/buildings. Lead can cause serious health problems, especially for pregnant women and young children. Please read this information closely to see what you can do to reduce lead in your drinking water.

Health Effects of Lead

Lead can cause serious health problems if too much enters your body from drinking water or other sources. It can cause damage to the brain and kidneys, and can interfere with the production of red blood cells that carry oxygen to all parts of your body. The greatest risk of lead exposure is to infants, young children, and pregnant women. Scientists have linked the effects of lead on the brain with lowered IQ in children. Adults with kidney problems and high blood pressure can be affected by low levels of lead more than healthy adults. Lead is stored in the bones and it can be released later in life. During pregnancy, the child receives lead from the mother's bones, which may affect brain development.

Sources of Lead

Lead is a common metal found in the environment. Drinking water is one possible source of lead exposure. The main sources of lead exposure are lead-based paint and lead-contaminated dust or soil, and some plumbing materials. In addition, lead can be found in certain types of pottery, pewter, brass fixtures, food, and cosmetics. Other sources include exposure in the work place and exposure from certain hobbies (lead can be carried on clothing or shoes).

New brass faucets, fittings, and valves, including those advertised as "lead-free," may contribute lead to drinking water. The law currently allows end-use brass fixtures, such as faucets, with up to 8 percent lead to be labeled as "lead free." However, plumbing fixtures labeled National Sanitation Foundation (NSF) certified may only have up to 2 percent lead. Consumers should be aware of this when choosing fixtures and take appropriate precautions.

[CWS–Insert utility specific information describing your community's source water – e.g. "The source of water from XX Reservoir does not contain lead" or "Community X does not have any lead in its source water or water mains in the street."] When water is in contact with pipes [or service lines], and plumbing containing lead for several hours, the lead may enter drinking water. Homes built before 1988 are more likely to have plumbing containing lead. New homes may also have lead, even "lead-free" plumbing may contain some lead.

EPA estimates that 10 to 20 percent of a person's potential exposure to lead may come from drinking water. Infants who consume mostly formula mixed with lead-containing water can receive 40 to 60 percent of their exposure to lead from drinking water. Don't forget about other sources of lead such as lead paint, lead dust, and lead in soil. Wash your children's hands and toys often as they can come into contact with dirt and dust containing lead.

Steps You Can Take to Reduce Exposure to Lead in Water

1. *Run your water to flush out lead.* Run water for 15-30 seconds [or insert a different flushing time if your system has representative data indicating a different flushing time would better reduce lead exposure in your community and if the State Primary Agency approves the wording] or until it becomes cold or reaches a steady temperature before using it for drinking or cooking, if it hasn't been used for several hours. This flushes lead-containing water from the pipes.

2. *Use cold water for cooking and preparing baby formula.* Do not cook with or drink water from the hot water tap; lead dissolves more easily into hot water. Do not use water from the hot water tap to make baby formula.

3. *Do not boil water to remove lead.* Boiling water will not reduce lead.

4. *Look for alternative sources or treatments of water.* You may want to consider purchasing bottled water or a water filter. Read the package to be sure the filter is approved to reduce lead or contact NSF International at 800-NSF-8010 or www.nsf.org for information on performance standards for water filters. Be sure to maintain and replace a filter device in accordance with the manufacturer's instructions to protect water quality.

5. *Test your water for lead.* Call us at [insert phone number for your water system] to find out how to get your water tested for lead. [Include information on your water system's testing program. For example, do you provide free testing? Are there labs in your area that are certified to do lead in water testing?]

6. *Get your child tested.* Contact your local health department or healthcare provider to find out how you can get your child tested for lead, if you are concerned about exposure.

7. *Identify if your plumbing fixtures contain lead.* New brass faucets, fittings, and valves, including those advertised as "lead-free," may contribute lead to drinking water. The law currently allows end-use brass fixtures, such as faucets, with up to 8% lead to be labeled as "lead free." However, plumbing fixtures labeled National Sanitation Foundation (NSF) certified may only have up to 2% lead. Consumers should be aware of this when choosing fixtures and take appropriate precautions.

What happened in your community?

[Insert information about how and when the exceedance was discovered in your community and provide information on the source(s) of lead in the drinking water, if known.]

[Insert information about what your system is doing to reduce lead levels in homes in your community.]

[Insert information about lead service lines in your community, how a consumer can find out if they have a lead service line, what your water system is doing to replace lead service lines, etc.]

[Insert information about the history of lead levels in tap water samples in your community. For example, have they declined substantially over time? Have they been low and risen recently? Is there a known reason for any lead level changes?]

For More Information...

Call us at [Insert Number] or (if applicable) visit our Web site at [Insert Web site Here]. For more information on reducing lead exposure around your home/building and the health effects of lead, visit EPA's Web site at www.epa.gov/lead, or contact your health care provider.

[We recommend you include the name of your system and the date that the information is being distributed, along with the state water system ID, somewhere on the notice.]

Consumer Notice of Tap Water Results Template for Community Water Systems – Option 1

[Information in italics is required/mandatory language and cannot be changed]

[Select the appropriate option from the 4 possible choices]

Dear (Consumer's Name),

[*Insert name of your water system*] appreciates your participation in the lead tap monitoring program. A lead level of [insert data from the laboratory analysis of the sample collected-make sure the value is in ppb] was reported for the sample collected on [date] at your location, [insert address of customer].

[OPTION #1] We are happy to report that your result as well, as the 90th percentile value for our water system, is below the lead action level of 15 parts per billion.

What Does This Mean?
Under the authority of the Safe Drinking Water Act, EPA set the action level for lead in drinking water at 15 ppb. This means utilities must ensure that water from the customer's tap does not exceed this level in at least 90 percent of the homes sampled (90th percentile value). The action level is *the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.* If water from the tap does exceed this limit, then the utility must take certain steps to correct the problem. Because lead may pose serious health risks, the EPA set a Maximum Contaminant Level Goal (MCLG) of zero for lead. The MCLG is *the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.*

What Are The Health Effects of Lead?
Lead can cause serious health problems if too much enters your body from drinking water or other sources. It can cause damage to the brain and kidneys, and can interfere with the production of red blood cells that carry oxygen to all parts of your body. The greatest risk of lead exposure is to infants, young children, and pregnant women. Scientists have linked the effects of lead on the brain with lowered IQ in children. Adults with kidney problems and high blood pressure can be affected by low levels of lead more than healthy adults. Lead is stored in the bones, and it can be released later in life. During pregnancy, the child receives lead from the mother's bones, which may affect brain development.

What Are The Sources of Lead?
The primary sources of lead exposure for most children are deteriorating lead-based paint, lead-contaminated dust, and lead-contaminated residential soil. Exposure to lead is a significant health concern, especially for young children and infants whose growing bodies tend to absorb more lead than the average adult. Although your home's drinking water lead levels were below the action level, if you are concerned about lead exposure, parents should ask their health care providers about testing children for high levels of lead in the blood.

What Can I Do To Reduce Exposure to Lead in Drinking Water?

- ***Run your water to flush out lead.*** If water hasn't been used for several hours, run water for 15-30 seconds [or insert a different flushing time if your system has representative data indicating a different flushing time

would better reduce lead exposure in your community and if the State approves the wording] or until it becomes cold or reaches a steady temperature before using it for drinking or cooking. This flushes lead-containing water from the pipes.

- ***Use cold water for cooking and preparing baby formula.***
- ***Do not boil water to remove lead.***
- ***Look for alternative sources or treatment of water.***
- ***Test your water for lead.***
- ***Identify if your plumbing fixtures contain lead.***

For More Information

Call us at *[insert your water system's phone number]*. For more information on reducing lead exposure around your home and the health effects of lead, visit EPA's Web site at **www.epa.gov/lead**, call the National Lead Information Center at 800-424-LEAD, or contact your health care provider.

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Consumer Notice of Tap Water Results Template for Community Water Systems – Option 2

[Information in italics is required/mandatory language and cannot be changed]

[Select the appropriate option from the 4 possible choices]

Dear (Consumer's Name),

[*Insert name of your water system*] appreciates your participation in the lead tap monitoring program. A lead level of [insert data from the laboratory analysis of the sample collected-make sure the value is in ppb] was reported for the sample collected on [date] at your location, [insert address of customer].

[OPTION #2] We are happy to report that your result was below the lead action level of 15 parts per billion. However, the 90th percentile value for our system was above the lead action level.

What Does This Mean?
Under the authority of the Safe Drinking Water Act, EPA set the action level for lead in drinking water at 15 ppb. This means utilities must ensure that water from the customer's tap does not exceed this level in at least 90 percent of the homes sampled (90th percentile value). The action level is *the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.* If water from the tap does exceed this limit, then the utility must take certain steps to correct the problem. Because lead may pose serious health risks, the EPA set a Maximum Contaminant Level Goal (MCLG) of zero for lead. The MCLG is *the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.*

We are taking a number of steps to correct the problem. We will begin sampling for lead every 6 months so we can closely monitor the lead levels in our water system. Your continued participation and support in our lead tap monitoring program is very important. In addition, we will initiate a Public Education campaign to ensure our customers know about the action level exceedance, understand the health effects of lead, the sources of lead and actions they can take to reduce exposure to lead in drinking water. We will also monitor our source water, initiate controls to reduce the corrosivity of our water (corrosive water can cause lead to leach from plumbing materials that contain lead) and initiate lead service line replacement.

What Are The Health Effects of Lead?
Lead can cause serious health problems if too much enters your body from drinking water or other sources. It can cause damage to the brain and kidneys, and can interfere with the production of red blood cells that carry oxygen to all parts of your body. The greatest risk of lead exposure is to infants, young children, and pregnant women. Scientists have linked the effects of lead on the brain with lowered IQ in children. Adults with kidney problems and high blood pressure can be affected by low levels of lead more than healthy adults. Lead is stored in the bones, and it can be released later in life. During pregnancy, the child receives lead from the mother's bones, which may affect brain development.

What Are The Sources of Lead?
The primary sources of lead exposure for most children are deteriorating lead-based paint, lead-contaminated dust, and lead-contaminated residential soil. Exposure to lead is a significant health concern, especially for young children and infants whose growing bodies tend to absorb more lead than the average adult.

Although your home's drinking water lead levels were below the action level, if you are concerned about lead exposure, parents should ask their health care providers about testing children for high levels of lead in the blood. Lead is rarely found in source water, but enters tap water through corrosion of plumbing materials. Homes built before 1986 are more likely to have lead pipes, fixtures and solder.

What Can I Do To Reduce Exposure to Lead in Drinking Water?

- ***Run your water to flush out lead.*** Run water for 15-30 seconds [or insert a different flushing time if your system has representative data indicating a different flushing time would better reduce lead exposure in your community and if the State approves the wording] or until it becomes cold or reaches a steady temperature before using it for drinking or cooking, if it hasn't been used for several hours. This flushes lead-containing water from the pipes.
- ***Use cold water for cooking and preparing baby formula.***
- ***Do not boil water to remove lead.***
- ***Look for alternative sources or treatment of water.***
- ***Test your water for lead.***
- ***Identify if your plumbing fixtures contain lead.***

For More Information
Call us at *[insert your water system's phone number]*. For more information on reducing lead exposure around your home and the health effects of lead, visit EPA's Web site at **www.epa.gov/lead**, call the National Lead Information Center at 800-424-LEAD, or contact your health care provider.

Consumer Notice of Tap Water Results Template for Community Water Systems – Option 3

[Information in italics is required/mandatory language and cannot be changed]

[Select the appropriate option from the 4 possible choices]

Dear (Consumer's Name),

[*Insert name of your water system*] appreciates your participation in the lead tap monitoring program. A lead level of [insert data from the laboratory analysis of the sample collected-make sure the value is in ppb] was reported for the sample collected on [date] at your location, [insert address of customer].

[OPTION #3] Your result is greater than the lead action level of 15 parts per billion. However, the 90th percentile value for our water system was below the lead action level.

What Does This Mean?
Under the authority of the Safe Drinking Water Act, EPA set the action level for lead in drinking water at 15 ppb. This means utilities must ensure that water from the customer's tap does not exceed this level in at least 90 percent of the homes sampled (90th percentile value). The action level is *the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.* If water from the tap does exceed this limit, then the utility must take certain steps to correct the problem. Because lead may pose serious health risks, the EPA set a Maximum Contaminant Level Goal (MCLG) of zero for lead. The MCLG is *the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.*

Your lead level may be due to conditions unique to your home, such as the presence of lead soldier or brass faucets, fittings and valves that may contain lead. Our system works to keep the corrosivity of our water as low as possible (corrosive water can cause lead to leach from plumbing materials that contain lead) and there are actions you can take to reduce exposure. We strongly urge you to take the steps below to reduce your exposure to lead in drinking water.

What Are The Health Effects of Lead?
Lead can cause serious health problems if too much enters your body from drinking water or other sources. It can cause damage to the brain and kidneys, and can interfere with the production of red blood cells that carry oxygen to all parts of your body. The greatest risk of lead exposure is to infants, young children, and pregnant women. Scientists have linked the effects of lead on the brain with lowered IQ in children. Adults with kidney problems and high blood pressure can be affected by low levels of lead more than healthy adults. Lead is stored in the bones, and it can be released later in life. During pregnancy, the child receives lead from the mother's bones, which may affect brain development. If you are concerned about lead exposure, you may want to ask your health care provider about testing children to determine levels of lead in their blood.

What Are The Sources of Lead?
Although most lead exposure occurs when people eat paint chips and inhale dust, or from contaminated soil, EPA estimates that 10 to 20 percent of human exposure to lead may come from lead in drinking water. Lead is rarely found in source water, but enters tap water through corrosion of plumbing materials. Homes built before 1986 are more likely to have lead pipes, fixtures and solder. However, new homes are also at risk: even legally "lead-free"

plumbing may contain up to 8 percent lead. The most common problem is with brass or chrome-plated brass faucets and fixtures which can leach significant amounts of lead into the water, especially hot water.

What Can I Do To Reduce Exposure to Lead in Drinking Water?

- ***Run your water to flush out lead.*** If water hasn't been used for several hours, run water for 15-30 seconds [or insert a different flushing time if your system has representative data indicating a different flushing time would better reduce lead exposure in your community and if the State approves the wording] or until it becomes cold or reaches a steady temperature before using it for drinking or cooking. This flushes lead-containing water from the pipes.
- ***Use cold water for cooking and preparing baby formula.*** Do not cook with or drink water from the hot water tap; lead dissolves more easily into hot water. Do not use water from the hot water tap to make baby formula.
- ***Do not boil water to remove lead***. Boiling water will not reduce lead.
- ***Look for alternative sources or treatment of water.*** You may want to consider purchasing bottled water or a water filter. Read the package to be sure the filter is approved to reduce lead or contact NSF International at 800-NSF-8010 or **www.nsf.org** for information on performance standards for water filters.
- ***Test your water for lead.*** Call us at *[insert phone number for your water system]* to find out how to get your water tested for lead. *[Include information on your water system's testing program. For example, do you provide free testing? Are there labs in your area that are certified to do lead in water testing?]*

For More Information

Call us at *[insert your water system's phone number]*. For more information on reducing lead exposure around your home and the health effects of lead, visit EPA's Web site at **www.epa.gov/lead**, call the National Lead Information Center at 800-424-LEAD, or contact your health care provider.

Consumer Notice of Tap Water Results Template for Community Water Systems – Option 4

[Information in italics is required/mandatory language and cannot be changed]

[Select the appropriate number from the 4 possible options]

Dear (Consumer's Name),

[*Insert name of your water system*] appreciates your participation in the lead tap monitoring program. A lead level of [insert data from the laboratory analysis of the sample collected-make sure the value is in ppb] was reported for the sample collected on [date] at your location, [insert address of customer].

[OPTION #4] Your result is greater than the lead action level and the 90th percentile value for our water system is also greater than the lead action level of 15 parts per billion.

What Does This Mean?
Under the authority of the Safe Drinking Water Act, EPA set the action level for lead in drinking water at 15 ppb. This means utilities must ensure that water from the customer's tap does not exceed this level in at least 90 percent of the homes sampled (90th percentile result). The action level is *the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.* If water from the tap does exceed this limit, then the utility must take certain steps to correct the problem. Because lead may pose serious health risks, the EPA set a Maximum Contaminant Level Goal (MCLG) of zero for lead. The MCLG is *the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.*

We are taking a number of steps to correct the problem. We will begin sampling for lead every 6 months so we can closely monitor the lead levels in our water system. Your continued participation and support in our lead tap monitoring program is very important. In addition, we will initiate a Public Education campaign to ensure our customers know about the action level exceedance, understand the health effects of lead, the sources of lead and actions they can take to reduce exposure to leads in drinking water. We will also monitor our source water, initiate controls to reduce the corrosivity of our water (corrosive water can cause lead to leach from plumbing materials that contain lead) and initiate lead service line replacement.

Although we are taking action to reduce lead levels, your elevated lead level may also be due to conditions unique to your home, such as the presence of lead soldier or brass faucets, fittings and valves that may contain lead. Our system works to keep the corrosivity of our water as low as possible (corrosive water can cause lead to leach from plumbing materials that contain lead) and there are actions you can take to reduce exposure. We strongly urge you to take the steps below to reduce your exposure to lead in drinking water.

What Are The Health Effects of Lead?
Lead can cause serious health problems if too much enters your body from drinking water or other sources. It can cause damage to the brain and kidneys, and can interfere with the production of red blood cells that carry oxygen to all parts of your body. The greatest risk of lead exposure is to infants, young children, and pregnant women. Scientists have linked the effects of lead on the brain with lowered IQ in children. Adults with kidney problems and high blood pressure can be affected by low levels of lead more than healthy adults. Lead is stored in the bones, and it can be released later in life. During pregnancy, the child receives lead from the mother's bones, which may affect

brain development. If you are concerned about lead exposure, you may want to ask your health care provider about testing children to determine levels of lead in their blood.

What Are The Sources of Lead?

Although most lead exposure occurs when people eat paint chips and inhale dust, or from contaminated soil, EPA estimates that 10 to 20 percent of human exposure to lead may come from lead in drinking water. Lead is rarely found in source water, but enters tap water through corrosion of plumbing materials. Homes built before 1986 are more likely to have lead pipes, fixtures and solder. However, new homes are also at risk: even legally "lead-free" plumbing may contain up to 8 percent lead. The most common problem is with brass or chrome-plated brass faucets and fixtures which can leach significant amounts of lead into the water, especially hot water.

What Can I Do To Reduce Exposure to Lead in Drinking Water?

- **Run your water to flush out lead.** If water hasn't been used for several hours, run water for 15-30 seconds [or insert a different flushing time if your system has representative data indicating a different flushing time would better reduce lead exposure in your community and if the State approves the wording] or until it becomes cold or reaches a steady temperature before using it for drinking or cooking,. This flushes lead-containing water from the pipes.
- **Use cold water for cooking and preparing baby formula.** Do not cook with or drink water from the hot water tap; lead dissolves more easily into hot water. Do not use water from the hot water tap to make baby formula.
- **Do not boil water to remove lead.** Boiling water will not reduce lead.
- **Look for alternative sources or treatment of water.** You may want to consider purchasing bottled water or a water filter. Read the package to be sure the filter is approved to reduce lead or contact NSF International at 800-NSF-8010 or **www.nsf.org** for information on performance standards for water filters.
- **Test your water for lead.** Call us at *[insert phone number for your water system]* to find out how to get your water tested for lead. *[Include information on your water system's testing program. For example, do you provide free testing? Are there labs in your area that are certified to do lead in water testing?]*
- **Identify if your plumbing fixtures contain lead.** New brass faucets, fittings, and valves, including those advertised as "lead-free," may contribute lead to drinking water. The law currently allows end-use brass fixtures, such as faucets, with up to 8% lead to be labeled as "lead free." Consumers should be aware of this when choosing fixtures and take appropriate precautions.

For More Information

Call us at *[insert your water system's phone number]*. For more information on reducing lead exposure around your home and the health effects of lead, visit EPA's Web site at **www.epa.gov/lead**, call the National Lead Information Center at 800-424-LEAD, or contact your health care provider.

Consumer Confidence Report Requirement

The annual consumer confidence report for community water systems must include the following mandatory language irrespective of whether the system detected lead in any of its samples:

> If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. [Name of Utility] is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

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Drinking Water Protection Division (DWPD)
Office of Ground Water and Drinking Water

Background

Safeguarding our nation's drinking water by developing effective and appropriate policy decisions and conducting program oversight depends on data of known and documented quality. Despite significant attention drawn to drinking water data quality including the media, Inspector General (IG) and the Government Accountability Office (GAO) reports, past efforts to achieve the data quality goal of 90% or completeness and accuracy still have not been met.

Currently, DWPD is modernizing the current IT capabilities via the SDWIS NextGen Project, which will improve data processing efficiencies, provide interoperability and transparency of compliance monitoring information across programmatic business lines, and ease adaptability to new rules. Even though it can be anticipated the new software system will improve data accuracy and completeness, the largest challenge is ensuring that all the required inventory information and determinations of violations are entered into the data system with high quality. This Data Quality Improvement Plan primarily focuses on the collection and the entry of all required data into NextGen with high quality and well-defined documentation.

This document lists a number of planned action items for the calendar years of 2013 and 2014.

Action Items

(1) Reporting Guidance and Requirements Documents Update

A number of reporting guidance and requirement documents include outdated information. Some information in the guidance documents are vague and can potentially cause different interpretations. The content of these documents are updated and reconciled.

Activity: Update and revise the following guidance and requirements documents to improve the data definitions and requirements.

Product: Updated guidance and requirements documents:

Revised Inventory Reporting Requirements for SDWIS/FED ('98)
SDWIS/FED Minimum Reporting Requirements (Quick Reference Guide)
DEI Documents

- Arsenic
- CCR
- Filter Backwash
- GWR
- IESWTR
- LCR
- LT2
- LT1
- Phase II Chem
- PN

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- RADs
- STG 1 DBP
- STG 2 DBP
- SWTR Old
- TCR

Miscellaneous for Cross-References and Update References

- Water Supply Guide
- FedRep 3.3 Requirements Appendices
- Master Violations Spreadsheet
- Data System Crosswalk
- FedRep Versions and Reportable Violations
- Guidance for Water System Treatment Data
- EPA Location Data Policy

(2) Develop and Implement Business Rules for Data Validation

The current SDWIS State data system that the states use to manage their PWSS Program data and to report their data to EPA lacks data integrity constraints. In other words, erroneous data can be entered without any rejection or warnings. Instead, data are validated when it reaches to EPA database and then, it is only indicated if it has a data quality issue. Ideally, the data should be entered without errors by the users. Well-documented business rules will assist users to enter the data correctly. Also, the implementation of these business rules as integrity constraints, triggers stored procedures will guide the users avoid entry of erroneous data into the data system (SDWIS NextGen).

Activity: Identify and develop the implementation of business rules for data validation. Implement the data validation logic into SDWIS NextGen.

Product: Document listing the business rules and associated logic and automated data validation functions in SDWIS NextGen software.

(3) Collaborate with Rule Managers in Identifying and Developing Trainings on Rules, Compliance Determination and Reporting

State compliance determinations play an integral role in determining the reliability of the data on violations reported to the national database, SDWIS/FED. Incorrect compliance determinations, when they do occur, are due in part to the complexity and number of drinking water rules and lack of understanding on how to determine the compliance and return to compliance (RTC) and on how to report this information. The need for training is critical, especially with the changing nature of state staff available to implement the drinking water regulations and that incorrect compliance determinations are a serious matter as they may affect public health.

Activity: Identify and recommend the areas for the Webinar/Trainings/Guidance tools and materials.

Product: List any training needs or issues identified from the other action items.

(4) Implement e-Data Verification functionality (e-DV) in SDWIS NextGen

In order to assess success or need for improvement, the data quality measures were developed from the data collected by on-site data verifications as well as the sample data extracted by the e-Data Verification tool at EPA HQ. SDWIS NextGen and compliance monitoring data in one central system will allow primacy agencies and EPA to perform e-Data Verification and calculate various data quality related measures. E-Data Verification functionality in SDWIS NextGen will empower the users to obtain the data verification results as often as they want and as needed without any time, money, and location constraints.

Activity: Define the requirements to incorporate e-Data Verification functionality into SDWIS NextGen.

Product: E-Data Verification functions in SDWIS NextGen.

(5) Conduct SDWIS Data Quality Analysis

Key features of required inventory data useful in examining compliance and for determining regulatory needs are not routinely reported (for example, consecutive systems or treatment). As a result, EPA cannot conduct analyses of national capability to treat certain contaminants. Other examples of required inventory data that are not routinely reported nor adequately reported are: (1) unique latitude/longitude coordinates for each source facility that are within reasonable geographic boundaries; (2) accurate physical addresses for treatment plants and/or unique locational coordinates; (3) current population served by water system; and (4) principle area served by PWS.

Activities:

1. Analyze for incorrect or missing required data to assist the states in completing the required fields.
2. Identify the fields that are conducive to the implementation of business rules for data validation.

Products:

1. Listing of missing or incorrect data that need improvement.
2. Documentation of business rules to eliminate occurrence of missing data in SDWIS NextGen.

(6) Address Locational Data Improvement Areas

Locational data as latitudes and longitudes of all public water supply sources are essential to effectively analyze data using geospatial techniques in Geographic Information Systems (GIS). Also, locational data are needed for all regulated water systems under the Safe Drinking Water Act as they can be essential in monitoring contaminant occurrences and identifying target areas for enforcement and compliance assistance based on various environmental assessments. In addition, locational data are critical for emergency preparedness and responses, and determining the environmental risks to public water supplies. The latitude and longitude coordinates and five

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methods, accuracy and description (MAD) codes under the 2006 Latitude/Longitude Data Standard are required to be reported for all active sources of water for all CWS and NTNCWS under the current guidance.

Activities:

1. Analyze SDWIS/FED data and identify data that does not meet minimum reporting requirements for locational data.
2. Identify and recommend issues to be addressed and any areas for inclusion in Webinars/Trainings/Guidance tools and materials.

Products:

1. Develop and provide a report of the locational issues found in SDWIS/FED for each primacy agency.
2. Consult with EPA regions, primary agencies and states to improve locational data submitted to SDWIS/FED.
3. Recommend areas to be included in Webinars/Trainings/Guidance tools and materials.

(7) Delayed Violation Reporting, Deleted Violations and Un-reported Violations

Violations are due to be reported by the end of the following quarter after awareness or the compliance period end date. It has been a known issue that violations are reported after the time frame specified in the data policy as well as the deletion of previously reported violation data. Also, some Primacy Agencies cannot report one or more types of rule violations or other data to EPA because they use older versions of Fed/Rep, which restricts their ability to report rule violations stemming from recent regulations. An additional challenge is that some of their unreported violations data are stored in electronic formats in several different data systems, databases or spreadsheets.

Activities:

1. Analyze timeliness of violation reporting and deleted violations in the Data Warehouse.
2. Develop a mapping tool to connect and map data from one or more data-systems and create one or more submission files (in this case, map the data to the SDWA 3.5 file) for violations data not contained within a primacy agency's Fed Rep submission file. Re-configure data mappings if there are changes to the data source, data elements or other events.

Products:

1. Table of the results of the analysis for Primacy Agencies to troubleshoot.
2. Process the States' new XML file from the data mapping tool into ODS.

(8) Monitor the ASDWA SDWIS Users Community Forum

The Association of State Drinking Water Administrators website includes a forum for drinking water professionals. The forum is for communication and the exchange of important information and experiences regarding SDWIS implementation, tools, and training. The discussion forums may be used as a technical support.

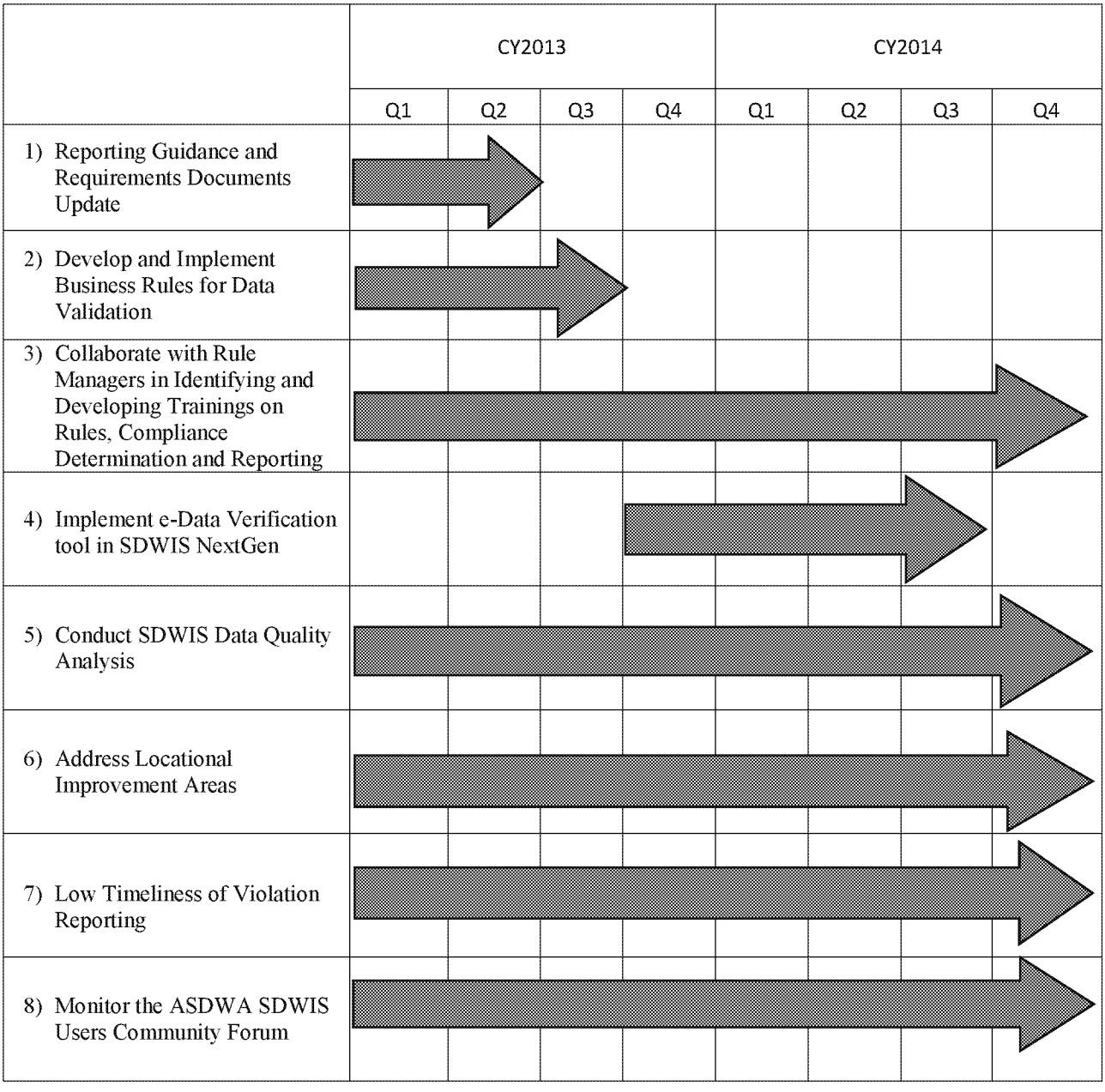
Activities:

1. Monitor and document relevant issues and discussion threads from the ASDWA SDWIS Users Community Forum.
2. Identify and recommend issues to be addressed and any areas for inclusion in Webinars/Trainings/Guidance tools and materials.

Products:

1. Table of relevant issues found on the forum and the discussion threads.
2. Recommend areas to be included in Webinars/Trainings/Guidance tools and materials.

Timeline


CY2013
CY2014
Q1
Q2
Q3
Q4
Q1
Q2
Q3
Q4
1) Reporting Guidance and Requirements Documents Update
2) Develop and Implement Business Rules for Data Validation
3) Collaborate with Rule Managers in Identifying and Developing Trainings on Rules, Compliance Determination and Reporting
4) Implement e-Data Verification tool in SDWIS NextGen
5) Conduct SDWIS Data Quality Analysis
6) Address Locational Improvement Areas
7) Low Timeliness of Violation Reporting
8) Monitor the ASDWA SDWIS Users Community Forum

Updated 2-4-14

DRAFT FY2013 EOY (October 1, 2012 through September 30, 2013) Status

MINNESOTA DEPARTMENT OF HEALTH PUBLIC WATER SYSTEM SUPERVISION PROGRAM

More detailed information about the implementation of drinking water and groundwater programs in Minnesota is shared between MDH and USEPA Region 5 on a *Lotus Quickr* collaborative internet site called *Region 5 State PWSS Programs*. This site will be migrated to a Microsoft SharePoint application in 2014.

Contacts:

- Minnesota Department of Health, Supervisor, Administrative Unit—Robert Smude, [HYPERLINK "mailto:robert.smude@state.mn.us"], (651) 201-4677
- U.S. EPA Region 5 State Program Manager – Janet Kuefler, [HYPERLINK "mailto:kuefler.janet@epa.gov"], (312) 886-0123

Federal funding used: PWSS grant; Drinking Water State Revolving Fund (DWSRF) wellhead protection (WHP), small systems technical assistance (SSTA), and PWSS set-asides

FY 2013 end-of-year evaluation synopsis: MDH continues to meet requirements to maintain primacy of the drinking water program, and public water systems continue to maintain high compliance rates with drinking water regulations. Public health protection remains a top priority. In FY2013, R5 commends MDH for exceeding its targets for all drinking water and source water protection national measures, which include those from OGWDW and OECA, except for those involving DWSRF (which was the case for most R5 states due to the challenge of predicting state and EPA funding levels and timing, as well as demand for loans and readiness to proceed.) R5 believes that the most recent DWSRF Performance Evaluation Report should be consulted for a more accurate status of the state's DWSRF program.

The most recent Regional shared goals, which represent CY2012 (data final as of 5/9/13) show that MDH met 6 of the 7 shared goals. MDH is commended for maintaining high compliance rates with drinking water monitoring and health-based standards, and also for systems that have a certified operator. The one shared goal that was not met was for "% of CWS with significant/major monitoring violations," and it was missed by just 0.2%. The FY14 measures and indicators summary, attached, provides more detailed results from all of the national and regional measures.

In FY2013, EPA, with contractor help, conducted a file review of MDH's drinking water program to ensure that correct compliance determinations are being made and that state violation data is reported to SDWIS for all federally-reportable violations. EPA also conducted an enforcement verification (EV) to evaluate whether or not MDH was following the enforcement processes outlined in available procedures and flow charts; review enforcement documentation in MDH's files; and compare MDH files with violation and enforcement information reported to the national Safe Drinking Water Information System (SDWIS). The EV findings revealed MDH's active field presence in responding to TCR MCL violations. R5 also found that MDH's

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compliance agreements met the definition of a formal enforcement action; however, R5 found a need for MDH to develop procedures for the timing of escalated enforcement.

In FY2013, MDH and R5 agreed that MDH will take formal enforcement (compliance agreement with a monitoring schedule) for nitrate, arsenic, and radionuclides MCL violations that cannot be resolved within 6 months. The State and Region will continue to prioritize health-based findings. We sincerely appreciate MDH's time and cooperation during the reviews, in reviewing draft documents, and in follow-up to the final reports. MDH has quickly implemented responses to address some of the issues found, and USEPA and MDH will continue to track status on remaining action items in FY14.

R5 will continue to work with MDH on implementation issues, such as handling gross alpha issues in light of considerable issues with the analytical methods associated with this parameter.

1. [HYPERLINK "https://epaqpx.rtp.epa.gov/QuickPlace/region5statepwssprograms/PageLibrary852579C300678739.nsf/h_Index/30F7F933B1A583A3852579C30068BC4A/?OpenDocument"] --MDH has primacy for, and is implementing all of the drinking water rules. MDH should either request an extension or submit the RTCR primacy application by February 2015. Follow up items from the findings of the December 2012 file review report and July 2013 enforcement verification report are included in the FY14 workplan. Region 5 will continue to track state reporting of new rule violations (LT2SWTR, GWR, LCR, and Stage 2 D/DBPR).

FY2013 EOY: MDH completed rule trainings, notification of requirements and other required activities. MDH has not yet reported violations for certain new rules, as indicated in the attached "measures and indicators" summary. MDH will do the following TOC and Stage 2 DBPR monitoring for Direct filtration systems (which did not take quarterly samples after April 2008):
a) start the four direct filtration systems on Monthly TOC monitoring in 2014 (if their TOC RAA is <= 2.0 mg/L, they qualify for reduced/quarterly TOC monitoring in 2015.)
b) These 4 systems will conduct routine DBP monitoring for Stage 2 until they qualify for reduced monitoring.

Region 5 will continue to work with MDH on implementation issues, including dealing with systems with elevated gross alpha levels.

2. [HYPERLINK "https://epaqpx.rtp.epa.gov/QuickPlace/region5statepwssprograms/PageLibrary852579C7001C49E2.nsf/h_Index/73B148574F969CC8852579C7007B6058/?OpenDocument"] --MDH will maintain a baseline core of individuals with the technical expertise needed to perform sanitary surveys. MDH will ensure that sanitary surveys are conducted periodically that, at a minimum, meet frequency requirements specified by rule. Region 5 will track state commitments to conduct sanitary surveys within the federally required intervals.

FY2013 EOY: During the 2012 file review, MDH sanitary surveys were found to contain all of the required elements, and exceeded federal minimum frequency. MDH is commended for completing sanitary surveys in a timely manner, with 100% of CWS surface water surveys completed on time, as indicated in the "measures and indicators" summary. Region 5 will report the final status of sanitary survey completions in April 2014, for the 3 year (CWS) or 5 year (NCWS) periods ending December 31, 2013. Please note that the national measure was modified in FY2014 to include ground water systems as well as surface water systems.

3. [HYPERLINK "https://epaqpx.rtp.epa.gov/QuickPlace/region5statepwssprograms/PageLibrary852579C7001C534D.nsf/h_Toc/d2dbcb20e5b01ba8852579e200593d92/?OpenDocument"]--MDH will provide an adequate laboratory certification program for all regulated contaminants, at a minimum to certify commercial laboratories within the State. Minnesota agrees to certify all laboratories that produce results for compliance with SDWA at least once every three years and will meet all regulatory requirements. [Note: the certification function is not performed by the Drinking Water Protection Section, but is done by the State lab. Both work together to ensure that analytical needs are met.]

FY2013 EOY:

a. The state drinking water program and lab have agreed on business rules to reconcile identified discrepancies in Region 5's evaluation of lab and sampling practices.
b. MDH is actively working with labs and sample collectors to address the small percentage of TCR samples that exceed the lab hold time of 30 hours by doing direct mailings to all systems and updating systems through newsletters and operator school. MDH recently began rejecting TCR samples not meeting the hold time, which Region 5 supports since organism die-off can occur with longer hold times.
c. R5 issued interim certification of the re-located Duluth lab on July 2, 2013. During 2014, Region 5 plans to audit all 7 MN District labs. In addition, during FY15, the Region will audit the MDH PSL and conduct the Lab Cert Program review.
d. MDH is also commended for successfully securing a Crypto Certification Officer and for actively engaging EPA in discussions about its plans for certifying Crypto labs. We understand that you have one laboratory accredited for crypto through secondary recognition (Florida DOH as Primary Accreditation Body) and have one interested potential applicant for primary accreditation through MNELAP.

4. [HYPERLINK "https://epaqpx.rtp.epa.gov/QuickPlace/region5statepwssprograms/PageLibrary852579C7001C5E4F.nsf/h_Toc/C3F4E9F22A7BE5B4852579E20059F97B/?OpenDocument"]--MDH and R5 implement data exchange to ensure that enforcement resources are targeted at the right PWSs. R5 tracks state commitments under measure SDWA02 (involving addressing with a formal enforcement action or RTC the # of priority systems equal to the # of its PWSs that have a score of 11 or higher on the July 2013 Enforcement Targeting Tool report) and updates Minnesota quarterly. R5 continues to look to states to refer noncompliant PWS. Also, MDH keeps records of pertinent state decisions.

FY 2013 EOY: The HQ Water Enforcement Division notified MDH in January 2013 that the MDH compliance agreement meets the definition of a formal enforcement action and therefore counts as an addressing action for purposes of complying with the Enforcement Response Policy. MDH met 200% of its commitment (commitment was 3 systems; achieved 6) for addressing violators under the national enforcement commitment. As previously noted, Region 5 completed an on-site enforcement verification of MDH's PWSS enforcement program in July 2013, and follow-up activities are included in the 2014 PWSS grant workplan. Region 5 will periodically request status updates on follow-up activities related to the file review and enforcement verification.

5. [HYPERLINK "https://epaqpx.rtp.epa.gov/QuickPlace/region5statepwssprograms/PageLibrary852579C7001C6D14.nsf/h_Toc/7e8558feaa002f62852579e2005a5942/?OpenDocument"]--Data Management staffing has been centralized into a new Department (MN.IT). Currently the same staff are working with DWP in the programming and management of MNDWIS. This, however, is expected to change over time. MDH maintains a data management system (and updates it for new rules, and new versions of FedRep) that tracks requirements for all rules, which includes the appropriate combination of hardware, software, and personnel to accurately and within a reasonable timeframe identify the inventories (including routine updates of system information), maintain water quality monitoring information, and track compliance with all M/R, MCL, MRDL, TT, PN, and public information requirements. MDH must report to EPA actions and sample data quarterly and inventory data at least annually in accordance with 40 CFR 142.15.

FY2013 EOY: MDH submits violation and enforcement data to SDWIS-FED on a quarterly basis and provides information to Region 5 to aid our review of the data submissions. MDH is commended for using FedRep 3.4, the latest version of FedRep available, to report to the ODS as of February 2013. The few errors on the ODS error reports (both inventory and action data) are often fixed within 48 hours. Any other errors identified by other Regional staff or HQ are fixed in a timely manner. Region 5 verified that all PWSs with a school service area have it marked as being a primary service area, as requested in the FY 2013 grant workplan.

A revised Inventory Reporting guidance is available on the ASDWA website. Region 5 is working with HQ on reviewing the Compliance Determination and Violation/Enforcement reporting tool (CDVRT) modules, and will provided training after all of the rule modules have been completed which is tentatively scheduled for late FY14. As of 1/24/13, Region 5 notes that MDH has not yet included in SDWIS-ODS violations identified in pages C-2 through C-4 of the file review, but we understand that MDH and the Region were still discussing action items on the file review and enforcement verification through late 2013, and these action items are included in the FY14 PWSS grant workplan.

6. [HYPERLINK "https://epaqpx.rtp.epa.gov/QuickPlace/region5statepwssprograms/PageLibrary852579C7001C774A.nsf/h_Toc/b57a954539c604ac852579c7007ac1fd/?OpenDocument"]--MDH establishes and maintains minimum standards for the operation and maintenance of all public water systems to ensure that certified and trained professionals are overseeing the treatment and distribution of safe drinking water and to promote compliance.

FY2013 EOY: MDH maintains excellent certified operator rates (97%+) for CWS and NTNCWS. MDH provided R5 with its procedure for escalating enforcement of operator certification violations, which R5 believes helps maximize public health protection. MDH DWP verifies proper certification of CWS and NTNCWSs twice a year (Oct 1 and Apr 1). Systems that do not have a properly certified water operator are sent an NOV and escalated enforcement is used as needed. In addition, the Certification Officer informally calls systems that do not have a properly certified operator twice a year (July 1 and January 1) to let them know the requirements and provide compliance assistance as needed. Using this approach, MDH typically has only 1-2 cases per year that escalate to formal enforcement.

7. [HYPERLINK "https://epaqpx.rtp.epa.gov/QuickPlace/region5statepwssprograms/PageLibrary852579C7001C80F8.nsf/h_Toc/c44bd48ffc9a87de852579c7007a146d/?OpenDocument"]--MDH ensures that new and existing CWSs/NTNCWSs can demonstrate technical, managerial, and financial capacity to operate in compliance with federal and state regulations. Minnesota annually (by September 30th each year) provides documentation to R5 showing the ongoing implementation of both the new systems program and the existing systems strategy to avoid 20% withholding of the DWSRF capitalization grant. The annual report should address the new Enforcement Targeting Tool-based capacity development reporting measures.

FY2013 EOY: Region 5 compiled highlights of the State's annual capacity development report, and noted that a few of the benchmarks used to measure the success of the program were impacted by issuing violations for any specific given month when systems do not meet turbidity and chlorine residual requirements, and for issuing late reporting violations, as required in follow up to the file review/EV. Overall, MN is commended for implementing an effective capacity development program.

8. [HYPERLINK "https://epaqpx.rtp.epa.gov/QuickPlace/region5statepwssprograms/PageLibrary852579C7001C8B1A.nsf/h_Toc/12c07c2d191e2cb1852579e2005abb0f/?OpenDocument"]--MDH reports the number of CWSs with source water protection (SWP) plans and the number of CWSs implementing SWP measures (electronically via SDWIS, if possible) as of June 30 by August 15. Update source water assessments, as resources allow, and complete source water assessment reports for new public water systems.

FY2013 EOY: The SWP program coordinates with the PWSS program on sustainability, identifying sources of contamination, and implementation of the GWR and sanitary surveys. High State priorities include keeping a complete and accurate county well index data base and sealing abandoned wells. The state is engaging with the agricultural community to develop a nutrient and phosphorus management plan. In December 2013, the State Technical Committee approved a special EQIP initiative to encourage agricultural practices that may limit nutrient loading in high and very highly vulnerable wellhead protection areas. First year funding will be approximately $250,000. State rule requires existing WHP plans to be amended after 10 years,

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which is resource intensive and may limit the degree to which new plans can be developed. The amendment workload is expected to increase in FY2014. MDH relies on other State and local program inspection programs, many of which have resource challenges of their own, to conduct inspections of potential contaminant sources in source water protection areas, such as leaking tanks, on-site systems, manure application, etc.

In December 2013, Region 5 GWDWB submitted comments on the MPCA/MDH draft Upper Mississippi bacteria TMDL study and protection plan for preliminary review. During FY2013, Region 5 also provided comments on the MN NPS management plan, MN nutrient reduction strategy, and MN 303(d) list/integrated report.

MDH provided a detailed report in September 2013 which includes updates on activities conducted using federal DWSRF WHP set-aside funds related to data management, policy development, site approvals, scoping meetings, approvals of WHP plans, and evaluation of the status of WHP implementation, technical assistance, regulatory assistance, and other special projects such as nitrate sensitivity mapping. This report is included in the DWSRF project officer's official grant file.

9. [HYPERLINK "https://epaqpx.rtp.epa.gov/QuickPlace/region5statepwssprograms/PageLibrary852579C7001C951B.nsf/h_Toc/440fbe4414d2d49385257b790057a639/?OpenDocument"]--This is a compilation of all quantitative measures that R5 uses to regularly assess program performance, including the national program measures, the logic model reporting tool measures, Regional shared goals, and Regional high priority queries.

FY2013 EOY: MDH did an outstanding job meeting targets for measures and indicators. Region 5 would like a status update on 3 items (underlying data files were sent previously.)

a. TCR systems with 2012 violations that showed no state response in SDWIS as of July 2013. R5 sent underlying data in file, "MN Indicator O6-1b . . . "
b. Lack of reporting to SDWIS of new rule violations. R5 sent file, "New rule violations"
c. Groundwater sanitary surveys not yet completed (for CWS—2011 to 2013) or (for NCWS—2009 to 2013), status as of October 2013 (still have rest of CY to complete). (FYI, the national GPRA FY 14 measure is for CWS only: Percent of community water systems (CWSs) that have undergone a sanitary survey within the past three years (five years for outstanding performers or those ground water systems approved by the primacy agency to provide 4-log treatment of viruses.) I included the NCWS status as well as part of the Region's high priority query data. R5 sent file, "Sanitary Survey Status . . . "

Draft Desired Reports

Data Warehouse Reports

Inventory.

Filter By:

- System Size
- PWS Type
- Source
- Facilities
- Treatments
- Region/Primacy Agency
- Wholesaler
- Consecutive System
- Active or not
- Deactivation Date
- Seasonal System
- Service Area
- Geographic area

Violation.

Filter By:

- Inventory characteristics
- Rule/Rule Group
- Contaminant
- Violation Type
- Is HB
- Violation Dates
- Current enforcement status

Enforcement.

Filter by:

- Inventory Characteristics
- Violation Characteristics
- Latest Enforcement Action and Time to Action
- First Enforcement Action and Time to action
- Formal enforcement action and Time to action
- RTC and time to RTC
- Unenforced Action

GPRA/NPM and SDW 1, 2 and 3

- % Sys / Pop / Person Months Sys / Person Months Pop with no HB violations
  Filter by:
- Inventory Characteristics
- Violation Characteristics
- Rule/Rule Group
- Contaminant

FY Reporting

- SDW 1a, 1b, 4a, 4b, 14, 15, 16, 17 and 18
- Annual Statistics

  SDW 1a and 1b Sanitary Survey - Number of systems undergone sanitary survey past 3 years
  Filter by:
  Inventory Characteristics

  SDW 4a and 4b - % Sys / Pop where risk is minimized by source water protection
  Filter by:
- Inventory Characteristics

  SDW 14 - Number and percent of (all and new) systems serving < 500 persons
  Filter by:
- Inventory Characteristics
- Last reported date

  SDW 15 - Number and percent of small PWSs <10,000 with repeat HB nitrate/nitrite, stage 1, SWTR and TCR violations
  Filter by:
- Inventory Characteristics
- Violation Characteristics
- Rule/Rule Group

SDW 16 - Average time for small PWS <10,000 to RTC acute HB nitrate/nitrite, stage 1, SWTR and TCR violations
Filter by:
- Inventory Characteristics
- Violation Characteristics
- Rule/Rule Group
- RTC and time to RTC

SDW 17 - Number and percent of schools/daycares that meet all HB standards
Filter by:
- Inventory Characteristics
- Service Area
- Violation Characteristics
- Rule/Rule Group
- RTC and time to RTC

SDW 18 LCR 90% (only reported every 3 years due 7/2013) - 90% Lead AL sample
Filter by:
- Inventory Characteristics

Annual Statistics
- % Sys / Pop / Person Months Sys / Person Months Pop
- State and Regional Totals
- GPRA Totals
- Ten Year time frame
- UIC Data provided by (UIC Team)

Filter by:
- Inventory Characteristics
- Violation Characteristics
- Rule/Rule Group

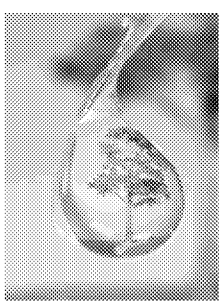
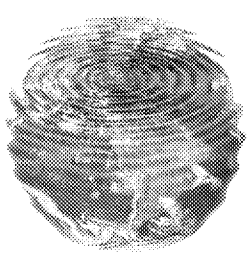
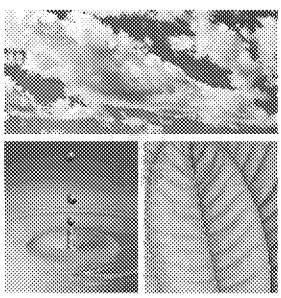
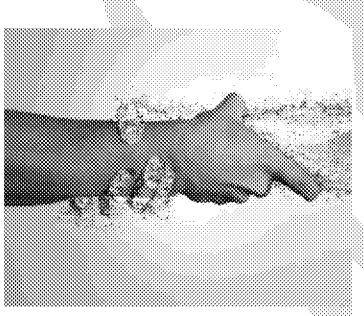
Other
- Other Standard Reports unaddressed above

Region 5 PWSS State Directors' Meeting

Tuesday, April 16 and
Wednesday, April 17, 2013

USEPA R5 Office
12th Floor Conference Centers
Lake Superior Room

77 W. Jackson Blvd, Chicago

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R5 PWSS Directors' Meeting Agenda

Tuesday, April 16, 2013, Lake Superior Room		
8:00 am	Early Bird Special: Coffee, Juice, Bagels, Cream Cheese and Networking	All
8:30 am	Setting the Stage for the Day: Welcome, Logistics, Introductions ➢ Optional for each State PWSS Director to add the following headline in introduction: *(please be brief, there will be more time during the end of the day Round Robin)*	Tom Poy Tinka Hyde State PWSS Directors
9:00 am	USEPA Headquarters' Perspectives *Objective: States will learn updated information and receive responses to questions on office priorities, budget outlook, nutrients, SDWIS NextGen, NCWS Capacity Development, RTCR, and other current topics.*	Mindy Eisenberg, OGWDW
10:00 am	**Break**	
10:15 am	SDWIS NextGen Sprint Participation *Objective: States will have the opportunity to discuss implementation concerns and raise issues related to potential impacts of SDWIS Next Gen on their programs. States participating in the Sprints.*	Cary McElhinney Tom Poy
11:00 am	Program Measures • National Measures (10 mins) • Shared goals (10 mins) • Regional high priority data queries, including new rule reporting such as LCR consumer notification violation reporting. (15 mins) • Data reporting issues: most common issues from recent file reviews (20 mins) *Objective: Discuss EOY status; shared goals status and high priority query indicators and measures of program performance. States/Region understand common file review (formerly data verifications) discrepancies found to better assess their programs.*	Tom Poy Rita Bair State PWSS Directors
12:00 pm	**Lunch On Your Own**	
1:00 pm	States Round Robin (15 minutes per state) • Issues, changes, areas of focus (OH, please mention "Toilet to Tap"; IL please mention Chromium VI) • What are our next steps? *Objective: Understand the status and challenges of State programs, share resources and insights, provide a foundation for future discussions of State priorities and R5 oversight priorities.*	State PWSS Directors
2:45 pm	**Break**	
3:00 pm	Nutrients • National and regional EPA CWA/SDWA integration activities on Nutrients o Activities on Western Basin of Lake Erie	Tom Poy Wendy Drake Tom Davenport State PWSS

	○ Nutrients Framework ○ WI Nitrate Project Status *Objective: Discuss where and how to better coordinate between states and R5.*	Directors
4:30 pm	**Adjourn**	
5:30 pm	Group Dinner- TBD Location: TBD. Meet in Club Quarters Hotel Lobby (111 W. Adams) at 5:30 PM to walk over to restaurant.	All
Wednesday, April 17, 2012, Lake Superior		
8:00 am	Early Bird Special: Coffee, Juice, Bagels, Cream Cheese, and Networking	All
8:30 am	Lead in Drinking Water • Lead Protocol Study • Chicago Activities related to Lead	Miguel Del Toral
9:30 am	Security	Charlene Denys
10:00 am	**Break**	
10:15 am	Revised Total Coliform Rule • Implementation issues ○ Monthly Monitoring ○ Level 1 & 2 Assessments	
11:15 am	**Brown Bag Presentation: Perfluorochemical RARE Project – Uptake in Crops**	Kim Harris
12:30 pm	Program Tools • CDVRT status • ARDP re-format (QuickR)	
1:45 pm	Review follow-up items, discuss date for next year's annual meeting, recommended changes to meeting format, etc.	All
2:00 pm	**End of meeting**	

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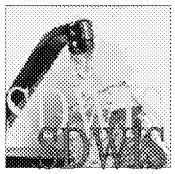

SAFE DRINKING WATER INFORMATION SYSTEM
ANNUAL PWS COMPLIANCE REPORT

Report Selection Criteria

EPA Region:	ALL
Primacy Agency:	WI
Water System ID:	ALL
Principal County:	ALL
Water System Status:	ACTIVE, CLOSED
Water System Type:	ALL
Owner Type:	ALL
Population Served:	ALL
Service Connections:	ALL
Compliance Period:	BETWEEN 1/1/2008 and 12/31/2008
Violation Codes:	ALL
Contaminant Codes:	ALL
Action Dates:	ALL
Issuing Agency:	ALL
Action Severity:	ALL
Action Codes:	ALL
Summary AC Report?	Yes
Details:	None
Data Last Updated:	04/01/2013
PWS Matching Criteria:	2,820

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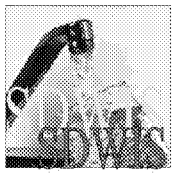
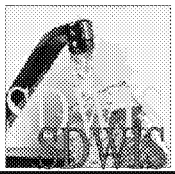


SAFE DRINKING WATER INFORMATION SYSTEM
ANNUAL PWS COMPLIANCE REPORT

EPA REGION: 05 | **AC Chem** | **PRIMACY AGENCY: WI**

Inorganic Contaminants (IOC)

Contaminant			MCLs			Monitoring		
Code	Name	MCL (mg/l)	# of Violations	# of RTC Violations	# of PWS in Violation	# of Violations	# of RTC Violations	# of PWS in Violation
1005	Arsenic	0.01000	77	3	18	12	11	6
1010	Barium	2.00000	2	0	1	1	0	1
1015	Cadmium	0.00500	0	0	0	1	0	1
1020	Chromium	0.10000	0	0	0	1	0	1
1025	Fluoride	4.00000	0	0	0	1	0	1
1035	Mercury	0.00200	0	0	0	1	0	1
1036	Nickel	0.00000	0	0	0	1	0	1
1038	Nitrate-Nitrite	10.00000	51	15	49	0	0	0
1040	Nitrate	10.00000	54	16	51	277	173	262
1041	Nitrite	1.00000	0	0	0	19	5	19
1045	Selenium	0.05000	0	0	0	1	0	1
1074	Antimony, Total	0.00600	1	0	1	1	0	1
1075	Beryllium, Total	0.00400	0	0	0	1	0	1
1085	Thallium, Total	0.00200	2	1	2	1	0	1
IOC Totals:			187	35	122	318	189	277



SAFE DRINKING WATER INFORMATION SYSTEM
ANNUAL PWS COMPLIANCE REPORT

EPA REGION: 05 | **AC Chem** | **PRIMACY AGENCY: WI**

Radionuclides Contaminants (RAD)

Contaminant			MCLs			Monitoring		
Code	Name	MCL (mg/l)	# of Violations	# of RTC Violations	# of PWS in Violation	# of Violations	# of RTC Violations	# of PWS in Violation
4000	Gross Alpha, Excl. Radon & U	15.00000	16	1	9	21	15	16
4006	Combined Uranium	30.00000	0	0	0	21	16	15
4010	Combined Radium (-226 & -228)	5.00000	25	3	11	19	14	14
RAD Totals:			41	4	13	61	45	17

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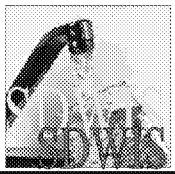


SAFE DRINKING WATER INFORMATION SYSTEM
ANNUAL PWS COMPLIANCE REPORT

EPA REGION: 05 | **AC Chem** | **PRIMACY AGENCY: WI**

Synthetic Organic Contaminants (SOC)

Contaminant Code	Name	MCL (mg/l)	MCLs # of Violations	MCLs # of RTC Violations	MCLs # of PWS in Violation	Monitoring # of Violations	Monitoring # of RTC Violations	Monitoring # of PWS in Violation
2039	Di(2-ethylhexyl) phthalate	0.00600	5	1	3	1	1	1
2050	Atrazine	0.00300	0	0	0	1	0	1
SOC Totals:			5	1	3	2	1	2

EPA REGION: 05 | **AC Chem** | **PRIMACY AGENCY: WI**

Volatile Organic Contaminants (VOC)

Contaminant Code	Name	MCL (mg/l)	MCLs # of Violations	MCLs # of RTC Violations	MCLs # of PWS in Violation	Monitoring # of Violations	Monitoring # of RTC Violations	Monitoring # of PWS in Violation
2378	1,2,4-Trichlorobenzene	0.07000	0	0	0	25	12	21
2380	cis-1,2-Dichloroethylene	0.07000	0	0	0	25	12	21
2955	Xylenes, Total	10.00000	0	0	0	25	12	21
2964	DICHLOROMETHANE	0.00500	0	0	0	25	12	21
2968	o-Dichlorobenzene	0.60000	0	0	0	25	12	21
2969	p-Dichlorobenzene	0.07500	0	0	0	25	12	21
2976	Vinyl chloride	0.00200	0	0	0	25	12	21
2977	1,1-Dichloroethylene	0.00700	0	0	0	25	12	21
2979	trans-1,2-Dichloroethylene	0.10000	0	0	0	25	12	21
2980	1,2-Dichloroethane	0.00500	0	0	0	25	12	21
2981	1,1,1-Trichloroethane	0.20000	0	0	0	25	12	21
2982	Carbon tetrachloride	0.00500	0	0	0	25	12	21
2983	1,2-Dichloropropane	0.00500	0	0	0	25	12	21
2984	Trichloroethylene	0.00500	0	0	0	25	12	21
2985	1,1,2-Trichloroethane	0.00500	0	0	0	25	12	21
2987	Tetrachloroethylene	0.00500	2	2	1	25	12	21
2989	CHLOROBENZENE	0.10000	0	0	0	25	12	21
2990	Benzene	0.00500	0	0	0	25	12	21
2991	Toluene	1.00000	0	0	0	25	12	21
2992	Ethylbenzene	0.70000	0	0	0	25	12	21
2996	Styrene	0.10000	0	0	0	25	12	21

EPA REGION: 05	AC Chem				PRIMACY AGENCY: WI	
VOC Totals:	2	2	1	525	252	21

EPA REGION: 05 **AC Rule** **PRIMACY AGENCY: WI**

Consumer Confidence Report (CCR)

Violation Type	Violation Name	# of Violations	# of RTC Violations	# of PWS in Violation
71	CCR Complete Failure to Report	26	17	24

EPA REGION: 05	AC Rule	PRIMACY AGENCY: WI

Disinfection Byproducts Rule (DBP)

Violation Type	Violation Name	# of Violations	# of RTC Violations	# of PWS in Violation
2	MCL, Average	14	0	4
27	Monitoring and Reporting (DBP)	18	12	16

	MCLs			Monitoring			Treatment Technique		
	# of Violations	# of RTC Violations	# of PWS in Violation	# of Violations	# of RTC Violations	# of PWS in Violation	# of Violations	# of RTC Violations	# of PWS in Violation
DBP Totals	14	0	4	18	12	16	0	0	0

EPA REGION: 05 | **AC Rule** | **PRIMACY AGENCY: WI**

Lead and Copper Rule (LCR)

Violation Type	Violation Name	# of Violations	# of RTC Violations	# of PWS in Violation
51	Initial Tap Sampling for Pb and Cu	4	1	4
52	Follow-up and Routine LCR Tap Sampling	32	17	30
65	Public Education	1	1	1

	MCLs			Monitoring			Treatment Technique		
	# of Violations	# of RTC Violations	# of PWS in Violation	# of Violations	# of RTC Violations	# of PWS in Violation	# of Violations	# of RTC Violations	# of PWS in Violation
LCR Totals	---	---	---	36	18	34	1	1	1

EPA REGION: 05	AC Rule	PRIMACY AGENCY: WI

Public Notice (PN)

Violation Type	Violation Name	# of Violations	# of RTC Violations	# of PWS in Violation
75	PN Violation for NPDWR Violation	4845	214	2306

EPA REGION: 05 | **AC Rule** | **PRIMACY AGENCY: WI**

Surface Water Treatment Rule (SWTR)

Violation Type	Violation Name	# of Violations	# of RTC Violations	# of PWS in Violation

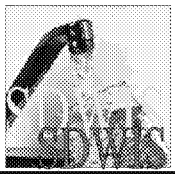
	MCLs			Monitoring			Treatment Technique		
	# of Violations	# of RTC Violations	# of PWS in Violation	# of Violations	# of RTC Violations	# of PWS in Violation	# of Violations	# of RTC Violations	# of PWS in Violation
SWTR/ IESWTR	---	---	---	0	0	0	0	0	0

EPA REGION: 05	AC Rule	PRIMACY AGENCY: WI

Coliforms (TCR)

Violation Type	Violation Name	# of Violations	# of RTC Violations	# of PWS in Violation
21	MCL, Acute (TCR)	43	37	41
22	MCL, Monthly (TCR)	414	350	335
23	Monitoring, Routine Major (TCR)	497	303	450
25	Monitoring, Repeat Major (TCR)	18	11	17

	MCLs			Monitoring			Treatment Technique		
	# of Violations	# of RTC Violations	# of PWS in Violation	# of Violations	# of RTC Violations	# of PWS in Violation	# of Violations	# of RTC Violations	# of PWS in Violation
TCR Totals	457	387	366	515	314	462	---	---	---



SAFE DRINKING WATER INFORMATION SYSTEM
ANNUAL PWS COMPLIANCE REPORT

EPA REGION: 05 | **State Summary** | **PRIMACY AGENCY: WI**

		MCLs			Monitoring			Treatment Technique			Consumer Notification		
Rule Type	Chemical Sub-Group	# of Viols	# of RTC Viols	# of PWS in Viols	# of Viols	# of RTC Viols	# of PWS in Viols	# of Viols	# of RTC Viols	# of PWS in Viols	# of Viols	# of RTC Viols	# of PWS in Viols
CHEM	VOC	2	2	1	525	252	21	---	---	---	---	---	---
CHEM	SOC	5	1	3	2	1	2	---	---	---	---	---	---
CHEM	IOC	187	35	122	318	189	277	---	---	---	---	---	---
CHEM	RAD	41	4	13	61	45	17	---	---	---	---	---	---
CHEM	TOTAL	235	42	139	906	487	309	---	---	---	---	---	---
RULE	TCR	457	387	366	515	314	462	---	---	---	---	---	---
RULE	LCR	---	---	---	36	18	34	1	1	1	---	---	---
RULE	SWTR	---	---	---	0	0	0	0	0	0	---	---	---
RULE	DBP	14	0	4	18	12	16	0	0	0	---	---	---
RULE	CCR	---	---	---	---	---	---	---	---	---	26	17	24
RULE	PN	---	---	---	---	---	---	---	---	---	4845	214	2306
Grand Total		706	429	504	1475	831	607	1	1	1	4871	231	2318

R5 comments on current SDWIS Water System Report

On Water System Characteristics selection section of first screen shot:

1) It's not clear why there are drop down menus for both "GW or SW" and "Primary Source" As you know, I am not yet able to access the report to see what on these menus, but I'm wondering what the criteria is for designating the primary source for systems with multiple types of sources. I would expect it would be the source type with the most stringent NPDWR requirements.
2) Season Begin Date From/To date selection and Season End Date From/To date selection is a good feature, but also add selection of all active seasonal systems.
3) On the screen shot for Geographic Area selection, as discussed, it would be great if the "County Served" drop down menu listed all the County for each State selected.

R5 comments on Data Warehouse Reports Inventory and Violation Filters and Desired Other Standard Reports

Data Warehouse Reports

Inventory.

Filter By:

- System Size
- PWS Type
- Source
- Facilities
- Treatments
- Region/Primacy Agency
- Wholesaler
- Consecutive System
- Active or not
- **First Reported Date**
- Deactivation Date
- Seasonal System
- Service Area
- Geographic area

Violation.

Filter By:

- Inventory characteristics
- Rule/Rule Group

- Contaminant
- Violation Type
- Is HB
- Violation Dates
- Current enforcement status
- **Major Violation Indicator for SWTR Turbidity and Disinfectant Residual M/R (Type 36) violations and IESWTR/LT1 Turbidity M/R (Type 38) violations.**
- **Add GWR violation codes and GWR contaminant code (0700)**

Other Standard Reports

L/C Report – The units get filtered out of State LCR data gets in the reporting process, but that needs to be stored in our database. Some States apparently do not make the effort to convert/report the data in whatever units we specify (i.e., they do not convert it from ug/L to mg/L or vice-versa) due to resource issues, so why can't we just let them report it the way they track it? The 90th percentile data is currently reported in both ug/L and mg/L and there is no way to tell which is which. It also seems that some States report all data, not just Cu AL exceedances, because it is easier and we cannot distinguish which are actually AL exceedances because we have no clue how many States are doing this, so the LCR data is practically useless as is.

Add two wildcard fields to all standard reports to identify and track specific things in our database. Databases never anticipate everything and the nice thing about wildcard fields is that we can assign/re-assign them depending on our needs. Two wildcard fields would greatly enhance users' ability to really customize reports. New rules come up, new priorities are set, etc., and having the two wildcards with user-specified codes allows for more (independent) user-specified combinations using the two wildcards.

Add the ability to run a Violation report for systems that had both type "x" violation(s) and type "y" violation(s) during a specified time period.

For all standard reports, add Microsoft Word to choices of format to run report to make it easier to extract the PWSIDs for systems of interest to run other reports for.

Updated 1-31-14

DRAFT FY2013 EOY (October 1, 2012 through September 30, 2013) Status

MINNESOTA DEPARTMENT OF HEALTH PUBLIC WATER SYSTEM SUPERVISION PROGRAM

More detailed information about the implementation of drinking water and groundwater programs in Minnesota is shared between MDH and USEPA Region 5 on a *Lotus Quickr* collaborative internet site called *Region 5 State PWSS Programs*. This site will be migrated to a Microsoft SharePoint application in 2014.

Contacts:

- Minnesota Department of Health, Supervisor, Administrative Unit—Robert Smude, [HYPERLINK "mailto:robert.smude@state.mn.us"], (651) 201-4677
- U.S. EPA Region 5 State Program Manager – Janet Kuefler, [HYPERLINK "mailto:kuefler.janet@epa.gov"], (312) 886-0123

Federal funding used: PWSS grant; Drinking Water State Revolving Fund (DWSRF) wellhead protection (WHP), small systems technical assistance (SSTA), and PWSS set-asides

FY 2013 end-of-year evaluation synopsis: MDH continues to meet requirements to maintain primacy of the drinking water program, and public water systems continue to maintain high compliance rates with drinking water regulations. Public health protection remains a top priority. In FY2013, R5 commends MDH for exceeding its targets for all drinking water and source water protection national measures, which include those from OGWDW and OECA, except for those involving DWSRF (which was the case for most R5 states due to the challenge of predicting state and EPA funding levels and timing, as well as demand for loans and readiness to proceed.) R5 believes that the most recent DWSRF Performance Evaluation Report should be consulted for a more accurate status of the state's DWSRF program.

The most recent Regional shared goals, which represent CY2012 (data final as of 5/9/13) show that MDH met 6 of the 7 shared goals. MDH is commended for maintaining high compliance rates with drinking water monitoring and health-based standards, and also for systems that have a certified operator. The one shared goal that was not met was for "% of CWS with significant/major monitoring violations," and it was missed by just 0.2%. The FY14 measures and indicators summary, attached, provides more detailed results from all of the national and regional measures.

In FY2013, EPA, with contractor help, conducted a file review of MDH's drinking water program to ensure that correct compliance determinations are being made and that state violation data is reported to SDWIS for all federally-reportable violations. EPA also conducted an enforcement verification (EV) to evaluate whether or not MDH was following the enforcement processes outlined in available procedures and flow charts; review enforcement documentation in MDH's files; and compare MDH files with violation and enforcement information reported to the national Safe Drinking Water Information System (SDWIS). The EV findings revealed MDH's active field presence in responding to TCR MCL violations. R5 also found that MDH's

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compliance agreements met the definition of a formal enforcement action; however, R5 found a need for MDH to develop procedures for the timing of escalated enforcement.

In FY2013, MDH and R5 agreed that MDH will take formal enforcement (compliance agreement with a monitoring schedule) for nitrate, arsenic, and radionuclides MCL violations that cannot be resolved within 6 months. The State and Region will continue to prioritize health-based findings. We sincerely appreciate MDH's time and cooperation during the reviews, in reviewing draft documents, and in follow-up to the final reports. MDH has quickly implemented responses to address some of the issues found, and USEPA and MDH will continue to track status on remaining action items in FY14.

R5 will continue to work with MDH on implementation issues, such as handling gross alpha issues in light of considerable issues with the analytical methods associated with this parameter.

1. [HYPERLINK "https://epaqpx.rtp.epa.gov/QuickPlace/region5statepwssprograms/PageLibrary852579C300678739.nsf/h_Index/30F7F933B1A583A3852579C30068BC4A/?OpenDocument"] --MDH has primacy for, and is implementing all of the drinking water rules. MDH should either request an extension or submit the RTCR primacy application by February 2015. Follow up items from the findings of the December 2012 file review report and July 2013 enforcement verification report are included in the FY14 workplan. Region 5 will continue to track state reporting of new rule violations (LT2SWTR, GWR, LCR, and Stage 2 D/DBPR).

FY2013 EOY: MDH completed rule trainings, notification of requirements and other required activities. MDH has not yet reported violations for certain new rules, as indicated in the attached "measures and indicators" summary. Region 5 will continue to work with MDH on implementation issues, including dealing with systems with elevated gross alpha levels.

2. [HYPERLINK "https://epaqpx.rtp.epa.gov/QuickPlace/region5statepwssprograms/PageLibrary852579C7001C49E2.nsf/h_Index/73B148574F969CC8852579C7007B6058/?OpenDocument"] --MDH will maintain a baseline core of individuals with the technical expertise needed to perform sanitary surveys. MDH will ensure that sanitary surveys are conducted periodically that, at a minimum, meet frequency requirements specified by rule. Region 5 will track state commitments to conduct sanitary surveys within the federally required intervals.

FY2013 EOY: During the 2012 file review, MDH sanitary surveys were found to contain all of the required elements, and exceeded federal minimum frequency. MDH is commended for completing sanitary surveys in a timely manner, with 100% of CWS surface water surveys completed on time, as indicated in the "measures and indicators" summary. Region 5 will report the final status of sanitary survey completions in April 2014, for the 3 year (CWS) or 5 year (NCWS) periods ending December 31, 2013. Please note that the national measure was modified in FY2014 to include ground water systems as well as surface water systems.

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3. [HYPERLINK "https://epaqpx.rtp.epa.gov/QuickPlace/region5statepwssprograms/PageLibrary852579C7001C534D.nsf/h_Toc/d2dbcb20e5b01ba8852579e200593d92/?OpenDocument"]--MDH will provide an adequate laboratory certification program for all regulated contaminants, at a minimum to certify commercial laboratories within the State. Minnesota agrees to certify all laboratories that produce results for compliance with SDWA at least once every three years and will meet all regulatory requirements. [Note: the certification function is not performed by the Drinking Water Protection Section, but is done by the State lab. Both work together to ensure that analytical needs are met.]

FY2013 EOY:

a. The state drinking water program and lab have agreed on business rules to reconcile identified discrepancies in Region 5's evaluation of lab and sampling practices.
b. MDH is actively working with labs and sample collectors to address the small percentage of TCR samples that exceed the lab hold time of 30 hours by doing direct mailings to all systems and updating systems through newsletters and operator school. MDH recently began rejecting TCR samples not meeting the hold time, which Region 5 supports since organism die-off can occur with longer hold times.
c. R5 issued interim certification of the re-located Duluth lab on July 2, 2013. During 2014, Region 5 plans to audit all 7 MN District labs. In addition, during FY15, the Region will audit the MDH PSL and conduct the Lab Cert Program review.
d. MDH is also commended for successfully securing a Crypto Certification Officer and for actively engaging EPA in discussions about its plans for certifying Crypto labs. We understand that you have one laboratory accredited for crypto through secondary recognition (Florida DOH as Primary Accreditation Body) and have one interested potential applicant for primary accreditation through MNELAP.

4. [HYPERLINK "https://epaqpx.rtp.epa.gov/QuickPlace/region5statepwssprograms/PageLibrary852579C7001C5E4F.nsf/h_Toc/C3F4E9F22A7BE5B4852579E20059F97B/?OpenDocument"]--MDH and R5 implement data exchange to ensure that enforcement resources are targeted at the right PWSs. R5 tracks state commitments under measure SDWA02 (involving addressing with a formal enforcement action or RTC the # of priority systems equal to the # of its PWSs that have a score of 11 or higher on the July 2013 Enforcement Targeting Tool report) and updates Minnesota quarterly. R5 continues to look to states to refer noncompliant PWS. Also, MDH keeps records of pertinent state decisions.

FY 2013 EOY: The HQ Water Enforcement Division notified MDH in January 2013 that the MDH compliance agreement meets the definition of a formal enforcement action and therefore counts as an addressing action for purposes of complying with the Enforcement Response Policy. MDH met 200% of its commitment (commitment was 3 systems; achieved 6) for addressing violators under the national enforcement commitment. As previously noted, Region 5 completed an on-site enforcement verification of MDH's PWSS enforcement program in July 2013, and follow-up activities are included in the 2014 PWSS grant workplan. Region 5 will periodically request status updates on follow-up activities related to the file review and enforcement verification.

5. [HYPERLINK "https://epaqpx.rtp.epa.gov/QuickPlace/region5statepwssprograms/PageLibrary852579C7001C6D14.nsf/h_Toc/7e8558feaa002f62852579e2005a5942/?OpenDocument"]--Data Management staffing has been centralized into a new Department (MN.IT). Currently the same staff are working with DWP in the programming and management of MNDWIS. This, however, is expected to change over time. MDH maintains a data management system (and updates it for new rules, and new versions of FedRep) that tracks requirements for all rules, which includes the appropriate combination of hardware, software, and personnel to accurately and within a reasonable timeframe identify the inventories (including routine updates of system information), maintain water quality monitoring information, and track compliance with all M/R, MCL, MRDL, TT, PN, and public information requirements. MDH must report to EPA actions and sample data quarterly and inventory data at least annually in accordance with 40 CFR 142.15.

FY2013 EOY: MDH submits violation and enforcement data to SDWIS-FED on a quarterly basis and provides information to Region 5 to aid our review of the data submissions. MDH is commended for using FedRep 3.4, the latest version of FedRep available, to report to the ODS as of February 2013. The few errors on the ODS error reports (both inventory and action data) are often fixed within 48 hours. Any other errors identified by other Regional staff or HQ are fixed in a timely manner. Region 5 verified that all PWSs with a school service area have it marked as being a primary service area, as requested in the FY 2013 grant workplan.

A revised Inventory Reporting guidance is available on the ASDWA website. Region 5 is working with HQ on reviewing the Compliance Determination and Violation/Enforcement reporting tool (CDVRT) modules, and will provided training after all of the rule modules have been completed which is tentatively scheduled for late FY14. As of 1/24/13, Region 5 notes that MDH has not yet included in SDWIS-ODS violations identified in pages C-2 through C-4 of the file review, but we understand that MDH and the Region were still discussing action items on the file review and enforcement verification through late 2013, and these action items are included in the FY14 PWSS grant workplan.

6. [HYPERLINK "https://epaqpx.rtp.epa.gov/QuickPlace/region5statepwssprograms/PageLibrary852579C7001C774A.nsf/h_Toc/b57a954539c604ac852579c7007ac1fd/?OpenDocument"]--MDH establishes and maintains minimum standards for the operation and maintenance of all public water systems to ensure that certified and trained professionals are overseeing the treatment and distribution of safe drinking water and to promote compliance.

FY2013 EOY: MDH maintains excellent certified operator rates (97%+) for CWS and NTNCWS. MDH provided R5 with its procedure for escalating enforcement of operator certification violations, which R5 believes helps maximize public health protection. MDH DWP verifies proper certification of CWS and NTNCWSs twice a year (Oct 1 and Apr 1). Systems that do not have a properly certified water operator are sent an NOV and escalated enforcement is used as needed. In addition, the Certification Officer informally calls systems that do not have a properly certified operator twice a year (July 1 and January 1) to let them know the requirements and provide compliance assistance as needed. Using this approach, MDH typically has only 1-2 cases per year that escalate to formal enforcement.

7. [HYPERLINK "https://epaqpx.rtp.epa.gov/QuickPlace/region5statepwssprograms/PageLibrary852579C7001C80F8.nsf/h_Toc/c44bd48ffc9a87de852579c7007a146d/?OpenDocument"]--MDH ensures that new and existing CWSs/NTNCWSs can demonstrate technical, managerial, and financial capacity to operate in compliance with federal and state regulations. Minnesota annually (by September 30th each year) provides documentation to R5 showing the ongoing implementation of both the new systems program and the existing systems strategy to avoid 20% withholding of the DWSRF capitalization grant. The annual report should address the new Enforcement Targeting Tool-based capacity development reporting measures.

FY2013 EOY: Region 5 compiled highlights of the State's annual capacity development report, and noted that a few of the benchmarks used to measure the success of the program were impacted by issuing violations for any specific given month when systems do not meet turbidity and chlorine residual requirements, and for issuing late reporting violations, as required in follow up to the file review/EV. Overall, MN is commended for implementing an effective capacity development program.

8. [HYPERLINK "https://epaqpx.rtp.epa.gov/QuickPlace/region5statepwssprograms/PageLibrary852579C7001C8B1A.nsf/h_Toc/12c07c2d191e2cb1852579e2005abb0f/?OpenDocument"]--MDH reports the number of CWSs with source water protection (SWP) plans and the number of CWSs implementing SWP measures (electronically via SDWIS, if possible) as of June 30 by August 15. Update source water assessments, as resources allow, and complete source water assessment reports for new public water systems.

FY2013 EOY: The SWP program coordinates with the PWSS program on sustainability, identifying sources of contamination, and implementation of the GWR and sanitary surveys. High State priorities include keeping a complete and accurate county well index data base and sealing abandoned wells. The state is engaging with the agricultural community to develop a nutrient and phosphorus management plan. In December 2013, the State Technical Committee approved a special EQIP initiative to encourage agricultural practices that may limit nutrient loading in high and very highly vulnerable wellhead protection areas. First year funding will be approximately $250,000. State rule requires existing WHP plans to be amended after 10 years, which is resource intensive and may limit the degree to which new plans can be developed. The amendment workload is expected to increase in FY2014. MDH relies on other State and local program inspection programs, many of which have resource challenges of their own, to conduct inspections of potential contaminant sources in source water protection areas, such as leaking tanks, on-site systems, manure application, etc.

In December 2013, Region 5 GWDWB submitted comments on the MPCA/MDH draft Upper Mississippi bacteria TMDL study and protection plan for preliminary review. During FY2013,

Region 5 also provided comments on the MN NPS management plan, MN nutrient reduction strategy, and MN 303(d) list/integrated report.

MDH provided a detailed report in September 2013 which includes updates on activities conducted using federal DWSRF WHP set-aside funds related to data management, policy development, site approvals, scoping meetings, approvals of WHP plans, and evaluation of the status of WHP implementation, technical assistance, regulatory assistance, and other special projects such as nitrate sensitivity mapping. This report is included in the DWSRF project officer's official grant file.

9. [HYPERLINK "https://epaqpx.rtp.epa.gov/QuickPlace/region5statepwssprograms/PageLibrary852579C7001C951B.nsf/h_Toc/440fbe4414d2d49385257b790057a639/?OpenDocument"]--This is a compilation of all quantitative measures that R5 uses to regularly assess program performance, including the national program measures, the logic model reporting tool measures, Regional shared goals, and Regional high priority queries.

FY2013 EOY: MDH did an outstanding job meeting targets for measures and indicators. Region 5 would like a status update on 3 items (underlying data files were sent previously.)

a. TCR systems with 2012 violations that showed no state response in SDWIS as of July 2013. R5 sent underlying data in file, "MN Indicator O6-1b . . . "
b. Lack of reporting to SDWIS of new rule violations. R5 sent file, "New rule violations"
c. Groundwater sanitary surveys not yet completed (for CWS—2011 to 2013) or (for NCWS—2009 to 2013), status as of October 2013 (still have rest of CY to complete). (FYI, the national GPRA FY 14 measure is for CWS only: Percent of community water systems (CWSs) that have undergone a sanitary survey within the past three years (five years for outstanding performers or those ground water systems approved by the primacy agency to provide 4-log treatment of viruses.) I included the NCWS status as well as part of the Region's high priority query data. R5 sent file, "Sanitary Survey Status . . . "

FY2013 WI DNR PUBLIC WATER SYSTEM SUPERVISION PROGRAM
WORK PLAN SUMMARY
October 1, 2012, through September 30, 2013
Reported as of 5/15/13

Contacts:

- WI DNR Public Water Supply Section Chief – Lee Boushon, [HYPERLINK "mailto:Lee.Boushon@wi.gov"], (608) 266-0857
- U.S. EPA Region 5 (R5) WI State Program Manager – Joe Janczy, [HYPERLINK "mailto:Janczy.Joseph@epa.gov"], (608) 267-2763

Federal funding used: PWSS grant; Drinking Water State Revolving Fund (DWSRF) State program management, local assistance (for capacity development and wellhead protection), and small system technical assistance set-asides; Operator Certification Expense Reimbursement grant; and Clean Water Act Section 106 funds (ground water)

NOTE: Click on the links below for summaries and more detailed information about WI's implementation of the national primary drinking water regulations (NPDWRs) or any of the activities below.

1. [HYPERLINK "https://epaqpx.rtp.epa.gov/QuickPlace/region5statepwssprograms/PageLibrary852579C70015BBF6.nsf/h_Toc/a4c0568ac09b2fc5852579c700161d51/?OpenDocument"] —WI DNR is implementing all of the drinking water rules, except where noted as discrepancies in the linked table. WI DNR does not have primacy for FBRR, LT2SWTR, GWR, LCRSTR, Stage 2 D/DBPR, and V & E, but has submitted them to R5 for primacy. R5 completed review of GWR and LCRSTR and corresponded with WDNR about necessary revisions. R5 continues primacy review for the other rules. R5 tracks state reporting of new rule violations (LT2SWTR, GWR, LCR, and Stage 2 D/DBPR). As of April 2013, WI DNR reported:

- No LT2 violations
- 281 GWR source water M/R violations
- 30 Stage 2 M/R violations
- 443 LCRSTR consumer notification M/R violations

2. [HYPERLINK "https://epaqpx.rtp.epa.gov/QuickPlace/region5statepwssprograms/PageLibrary852579C700157D04.nsf/h_Toc/9ba56cee8247ce01852579c700167798/?OpenDocument"] – WI DNR maintains staff with the technical expertise needed to perform sanitary surveys. WI DNR ensures that sanitary surveys are conducted periodically that, in the vast majority of cases, meet frequency requirements specified by rule. For TNs in contracted counties, WI DNR must manage and continue to evaluate the performance of sanitary surveys conducted by county health departments by reviewing the extent to which significant deficiencies are being identified, and whether frequency requirements are being met. R5 tracks state commitments to conduct sanitary surveys within the federally required intervals. As of April 2013:

- SURFACE WATER SYSTEMS: 100% (56/56) of the sanitary surveys at Subpart H systems were completed between 2010 and 2012.

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- GROUND WATER SYSTEMS: 97.9% (973/994) of CWSs were completed between 2010 and 2012. 99.6% (779/782) of NTNCWSs and 99.6% (8822/8855) of TNCWSs were completed between 2008 and 2012.

3. [HYPERLINK "https://epaqpx.rtp.epa.gov/QuickPlace/region5statepwssprograms/PageLibrary852579C70016055A.nsf/h_Toc/50a7a2f7c68b0990852579c7001671af/?OpenDocument"] — The state is meeting expectations because: (1) R 5 maintains certification for the Wisconsin State Laboratory of Hygiene (WSLH), (2) the program uses direct certification and reciprocal agreements to certify commercial labs within the state, and (3) a process for ensuring capacity to analyze at the principal state lab or commercial labs all NPDWR parameters that are required to be sampled in the state is maintained. Laboratory certification responsibilities in Wisconsin are split between the WI DNR (chems), and WI DATCP (micro). Potential areas of concern include certifying labs for cryptosporidium, radionuclide, and asbestos analysis.

4. [HYPERLINK "https://epaqpx.rtp.epa.gov/QuickPlace/region5statepwssprograms/PageLibrary852579C70015D26C.nsf/h_Toc/d247c4442932350b852579c700165c4b/?OpenDocument"]—WI DNR will ensure public water systems regain compliance with NPDWRs. R5 tracks state commitments under measure SDWA02 and updates WI DNR quarterly. WI DNR's 2012 commitment is to address or resolve 120 systems, and has met this commitment by addressing or resolving 135. For 2013, WI DNR commits to address or resolve 38 systems. WI DNR does not commit to follow-up on CCR, and LCR Consumer Notification violations. WI DNR does not commit to follow-up on PN violations originating from Tier 2 and 3 violations. R5 looks forward to discussing WI DNR reinvestment as program vacancies are filled.

5. [HYPERLINK "https://epaqpx.rtp.epa.gov/QuickPlace/region5statepwssprograms/PageLibrary852579C700159C89.nsf/h_Toc/f773ba3fde21dac7852579c7001641c9/?OpenDocument"]— WI DNR maintains a data management system that tracks requirements for all rules and serves as the central store of data reported by laboratories, field offices and County Health Departments. WI DNR uses FedRep 3.2 , but needs to upgrade to 3.4, to report GWR TT violations to EPA. PWS Monthly Operating Report information is now being submitted, captured and stored electronically in DWS. WI DNR's reporting of TCR and nitrate violations continue to improve. In 2011, 99.6% of the TCR violations and 100% of the nitrate violations were reported on-time.

6. Security – WI DNR is expected to adopt and implement an adequate plan for the provision of safe drinking water under emergency circumstances including, but not limited to, earthquakes, floods, hurricanes, and other natural disasters. R5 will review state emergency plans and consult with the state on implementation capabilities.

7. [HYPERLINK "https://epaqpx.rtp.epa.gov/QuickPlace/region5statepwssprograms/PageLibrary852579C700158EB5.nsf/h_Toc/919b620e10f28d06852579c7001669e9/?OpenDocument"] —WI DNR established and maintains minimum professional standards for the operation and maintenance of all public water systems to ensure that skilled professionals are overseeing the treatment and distribution of safe drinking water and to promote compliance. WI DNR annually – by September 30th each year – provides documentation to EPA showing the ongoing

implementation of the program to avoid 20% withholding of the DWSRF grant. On June 30, 2012, only 10 of the 1,919 WI systems required to have a certified operator did not have one. WI DNR improved its data system to revise exams more efficiently. It should update its study guide and exam questions to reflect new rule requirements.

8. [HYPERLINK "https://epaqpx.rtp.epa.gov/QuickPlace/region5statepwssprograms/PageLibrary852579C700158751.nsf/h_Toc/b64a188dd87b1337852579c70016637d/?OpenDocument"] —WI DNR ensures that new and existing CWSs/NTNCWSs can demonstrate technical, managerial, and financial capacity to operate in compliance with federal and state regulations. WI DNR annually - by September 30th each year - provides documentation to R5 showing the ongoing implementation of both the new systems program and the existing systems strategy to avoid 20% withholding of the DWSRF capitalization grant. The annual report should address the new capacity development reporting measures. Some examples of the numerous activities taken by the WI DNR to strengthen system capacity in FFY 2012 include:

- Reviewed 648 water system engineering plans to provide an initial safeguard for new projects, like installing new wells, water treatment systems, well facilities, water mains, and developing wellhead protection plans.
- Launched a new version of the Mobile Sanitary Survey System software program for field use on tablet and laptop PCs.
- Enhanced consistency and improved data accuracy by launching a new internet based County Sanitary Survey System for contracted county staff who perform sanitary surveys and collect water samples at transient non-community water systems in 45 WI counties.

Region 5 wants to know when WI DNR will end the LCR consumer notification disinvestment. It was the stated reason why 35% of the new systems that became active in the last three years had active violations.

9. [HYPERLINK "https://epaqpx.rtp.epa.gov/QuickPlace/region5statepwssprograms/PageLibrary852579C70015F083.nsf/h_Toc/383d4a88413b802e852579c700167d85/?OpenDocument"] —WI DNR reports the number of CWSs with source water protection (SWP) plans and the number of CWSs implementing SWP measures (electronically via SDWIS, if possible) as of June 30 by August 15. WI DNR is meeting its 13% target to minimize risk at CWSs through source water protection for both CWSs and their population served. WI DNR will update source water assessments, as resources allow, especially in prioritized areas, and complete source water assessment reports for new public water systems. WI DNR recently modified its wellhead protection program to include a facilitated incentive approach for geographic target areas. WI DNR is facilitating actions with partners and stakeholders in two areas in Rock and Sauk Counties to field truth if measureable nitrate reductions in groundwater can be achieved and sustained cost effectively.

10. [HYPERLINK "https://epaqpx.rtp.epa.gov/QuickPlace/region5statepwssprograms/PageLibrary852579C70015F8CA.nsf/h_Toc/dd322cacf7ab97ca852579c7001687eb/?OpenDocument"] —There are multiple national measures in the national program manager guidance that support the "water safe to drink" subobjective 2.1.1 in EPA's strategic plan, and R5 is also tracking several other measures, including those in the logic model reporting tool, regional shared goals, and regional high

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priority queries. The most recent data for Wisconsin for each of these measures are available via the "measures and indicators" link, some of which have been described above in this work plan summary.

11. Resources and expertise —WI DNR maintains a baseline core of individuals with the technical expertise to carry out all mandatory components of the PWSS Program (including engineering plan and specification review and emergency response) . In 2012, WI DNR had the equivalent of nearly 73 full-time staff working with the 11,409 public water systems. Sixty-three percent of the 2012 PWSS program budget was federally funded.

Contracts with third parties conducting mandatory components of the PWSS Program will make performance expectations clear, and will be measured and evaluated by the Department. In 2012, sixteen percent of the budget went to contracts with associations, county health departments, and consultants.

WI DNR develops and implements a plan to provide adequate funding to carry out all functions of the PWSS program and has been recently successful at filling vacancies. R5 will want WI DNR to make progress in reinvesting to close acknowledged program discrepancies.

DRAFT

Prepare Annual Shared Goals Results

Branch Chief _____
Signature and Date

QA Contact _____
Signature and Date

For the 2006-2011 period, we will track 12 specific measures in Region 5 in order to track compliance trends, identify areas needing improvement, and getting State commitments to improve compliance. Also for this time period, we plan to utilize data pulls already being done by HQ to better align with national data. These shared goals queries will be run using the frozen database each April. The April frozen data represents a full calendar year of violations reported and also provides a mid-year check on GPRA commitments.

Described below are how the two separate sets of data are gathered for the health-based violations and significant/major monitoring and reporting (M&R) violations.

HEALTH-BASED VIOLATIONS

1. The underlying data set for the 5 health-based shared goals measures is the rolling quarter pivot table, now called NPM Measures 1st Q pivot tables, generated using the April frozen data. This should be available in mid-to-late April. The reason this is done is so that the States do not have to evaluate two different sets of data. As a result, the FY2010 and beyond data now reflect the restructured GPRA criteria.
2. Open the Main PTable and filter by Region 5 only and State-specific results. Copy this to a new document. Also, copy the General Info page into the new document.
3. Drag down and filter by PWS type. The results can immediately be used for Milestone #7 – Transient Water Systems meeting all health-based standards. The other milestones, however, need to be generated for the existing and new standards.
4. Two copies of the MainPTable need to be created. Within each pivot table, the violations that are uniquely related to existing rules versus new rules need to be generated. This is done by removing the GPRA-related values from the view and creating a filter for CType. The criteria for the existing rules include the following CTypes: LCR, Nitrates, VOC, SOC, Other IOC, SWTR and TCR. The criteria for the new rules include the following CTypes: Arsenic, FBRR, GWR, IESWTR, LT1ESWTR, LT2ESWTR, Rads, and Stage 1 DBP.
5. Four new underlying data sheets need to be created by double-clicking on the cell to generate worksheets for CWS Existing Rules, CWS New Rules, NTNCWS Existing Rules, and NTNCWS New RulesFor each of the new underlying/raw data worksheets. The systems need to be sorted by PWS ID and a new column for unique System Count generated after the PWSID (=IF(A2=A1,0,1). I then filtered by System Count = 0 and deleted all population data from those rows. Re-filter for all.
6. Two new worksheets/pivot tables are then generated for each of the CWS worksheets: CWS Existing Rules and CWS New Rules. One pivot table will be for displaying the violations with a filter by system count and the other to display the population in violation. One new worksheet/pivot table needs to be generated for the NTNCWS systems: NTNCWS Existing Rules and NTNCWS New Rules to display the count of systems with violations. The population pivot table is not needed.
    a. The Systems in violation worksheets (NewHBPT and ExistingHBPT) for both CWS and NTNCWS display the unique violations and filtered by System Count.
    b. The CWS Population pivot tables are built with the State as the column and the retail population as the data. The format of the data (Value Field Setting) needs to change from "count" to "sum". Within that pivot table the total population for each State can be copied and pasted and the formula for the population in violation divided by the total population generated.

7. The results were then copied and pasted to a new worksheet titled "Inventory&Results". Other ways of summarizing the data can be developed. However, I copied the main pivot table (pasted as values only) and then modified it to display by State and system type, the total # of systems and total population broken out by active and closed status. Within that worksheet, I copied and generated the results for all the milestones for the Health-based Rules. (Example in Attachment 1).
8. Finally, the results need to be transferred over to the Shared Goals Summary Tables. Locate the "Shared Goals table 2006-2011" file in the g:/user/share/gwdw/shared goals folder. Add the results to the Word document. This may involve deleting the oldest year and adding a new column for the newest year.
9. Save this Excel file as Health-Based Shared Goals in the g:/user/share/gwdw/shared goals folder.

SIGNIFICANT/MAJOR MONITORING AND REPORTING VIOLATIONS

The 7 monitoring and reporting shared goals measures are based on the Annual Compliance Report queries used to generate the ACR standard report. These also cover violations for a calendar year. These shared goals queries, however, do not include the CCR and public notice violations that are included in the ACR report. The SQL query is included in Attachment 2. It is important to note that for FY2010 we included new rules, however, the ACR guidance had not been revised for the new rules. Therefore, we found that we may want to delete the LCRSTR violation type 66 from the list of significant violations from the final results. It was not felt that this consumer notification violation was a significant/major M&R violation. The query attached, however, does not separate this out at this time.

1. Once the April frozen data base is available, follow the separate procedures to access the Latest Quarter database from the Data Warehouse (SOP#28) and run the query in the ACCESS database. Change the dates in the query as needed for the next calendar year (e.g. compliance period begin and end dates). Save the query and export it to an Excel file.
2. Name the worksheet Raw Data and the file as SharedGoalsM&R CYxxxx.
3. Sort the worksheet by PWS ID. Then, add a new column to the raw data worksheet before PWS ID and add the "System Count" feature (=IF(B2=A1,0,1) and select "Enter". Make sure this formula is copied for the remainder of the column. Every system should now either a 1 or 0.
4. Select the entire data set and create a pivot table. Build the new pivot table by dragging Viol ID into the data table. Filter by State and PWS Type. Drag and select as filter options the Violation Type and System Count. Save this worksheet as "Main PTable".
5. Filter the Main Ptable for CWS only and double click the Grand Total cell. This will create a new worksheet with CWS results only. Save this worksheet tab as CWS Systems.
6. As was done above in the HB violation, select System Count = 0 and delete the population data for those rows. Then reset the system count to all. Create a pivot table for the CWS systems with significant/major M&R violations and another for the population affected.
7. Go back to the Main PTable and reset to Non-Transient Non-Community systems only. Add the filter for CType_pt to the pivot table. Select only the Acute Rules (SWTR, I_LT1ESWTR, Nitrates, GWR, and TCR). Double click on the Grand Total cell and create a new worksheet. Label that worksheet "Acute NTNCWS Raw Data". Delete the System Count column and resort by PWS ID. Then, add a new column to the raw data worksheet after PWS ID and add the "System Count" feature (=IF (A3=A2,0,1). Make sure all the rows have a 1 or 0 for system count.
8. Select the entire worksheet and build a new pivot table. Build the new pivot table by dragging Viol ID into the data table. Filter by State. Drag and select outside of the table, Region, Violation Type,

CType_pt, Major Violation Indicator, PWS Type (NTNCWS) and System Count. Make sure to select System Count "1" only to get the final results. Save this worksheet as :"Acute NTNCWS PTable".

9. Go back to the Main PTable and reset filter for CType_pt to chronic rules. Check all the boxes except for SWTR, I_LT1ESWTR, Nitrates, and TCR. Double click on the Grand Total cell and create a new worksheet. Label that worksheet "Chronic NTNCWS Raw Data". Delete the System Count column and resort by PWS ID. Then, add a new column to the raw data worksheet after PWS ID and add the "System Count" feature (=IF(A3=A2,0,1) and make sure all the rows are populated.
10. Select the entire worksheet and build a new pivot table. Build the new pivot table by dragging Viol ID into the data table. Filter by State. Drag and select outside of the table, Region, Violation Type, CType_pt, Major Violation Indicator, PWS Type (NTNCWS) and System Count. Make sure to select System Count "1" only to get the final results. Save this worksheet as "Chronic NTNCWS PTable".
11. Go back to the Main Ptable and double click on the Total Transient Water System violations to create a new worksheet. Delete the System Count column and resort by PWS ID. Then, add a new column to the raw data worksheet after PWS ID and add the "System Count" feature (=IF(A3=A2,0,1) and make sure all the rows are populated.
12. Go back to the Main Ptable and make sure it displays all the PWS type and rules again. Save this file as Final Shared Goals M&R (add year?).
13. Go back to the NPM 1stQ Pivot Table for April and get the total counts of systems and population for each system type. Then using the data from the Final Shared Goals M&R file, calculate the % with significant/major monitoring violations.
14. Locate the "Shared Goals table 2006-2011" file and the "Shared Goals Regional Trends" file in the g:/user/share/gwdw/shared goals folder. Add the results to the Word document.

Attachment 1

Geography_type	(All)
EPA_Region	05
GwSw	(All)
PSource	(All)
SizeCat5	(All)
SizeCat11	(All)
SchoolOrChildcare	(All)
PrimaryServiceArea	(All)
EnfActionType	(All)
RTCed	(All)
NPMViol	(All)
Year	(All)
Qtr	(All)
DatePulled	Apr20 11

PWSs Reporting Health-Based Violations (GPRA)

These statistics are calculated each quarter using the most recent 4 quarters of health-based compliance information in SDWISFED

Dates pulled: Q1 in April, Q2 in July, Q3 in October, Q4 in January

In the category **All** rules, where PWSType = CWS:

Sub-Objective **SDW-2.1.1 = GPRA-pop**

Strategic Target **SDW-SP1.N11 = GPRA-sys**

Strategic Target **SDW-SP2 = Pmonths-pop**

Strategic Target **SDW-SP3.N11 = GPRA-pop**, where the Geography_type = **Tribal**

Double-click any data cell for PWSs reporting health-based violations, and months out of compliance

		Active		Closed										
PWSType	**State**	**TotSys**	**TotPop**	**TotSys**	**TotPop**	TOTALSys	TOTALPOP	Existing Viol Sys		Existing ViolPop		NewViol Sys		NewViol Pop
CWS	05	76	114,534	1	101	77	114,635	3	96.1%	498	99.6%	1	98.7%	170
	IL	1,749	12,112,932	8	704	1,757	12,113,636	39	97.8%	68400	99.4%	64	96.4%	319214
	IN	813	4,871,633	11	3,434	824	4,875,067	55	93.3%	38290	99.2%	16	98.1%	108940
	MI	1,400	7,620,511	8	1,378	1,408	7,621,889	53	96.2%	149875	98.0%	21	98.5%	73935
	MN	961	4,254,944	1	25	962	4,254,969	21	97.8%	101709	97.6%	36	96.3%	50517
	OH	1,249	10,428,655	22	6,418	1,271	10,435,073	42	96.7%	181852	98.3%	33	97.4%	113863
	WI	1,067	3,997,816	7	260	1,074	3,998,076	81	92.5%	172301	95.7%	19	98.2%	153911
CWS Total		**7,315**	**43,401,02**	**58**	**12,320**	7,373	43,413,345	**294**	96.0%	**712925**	98.4%	**190**	97.4%	**820550**

			5									
NTNCWS	05	24	26,614	2	5,215	26	31,829	0	100.0 %		0	100.0%
	IL	416	133,802	10	1,954	426	135,756	12	97.2%		6	98.6%
	IN	576	194,879	29	6,400	605	201,279	45	92.6%		8	98.7%
	MI	1,369	325,182	91	12,832	1,460	338,014	49	96.6%		68	95.3%
	MN	502	76,207	14	1,127	516	77,334	11	97.9%		10	98.1%
	OH	737	215,077	38	9,693	775	224,770	55	92.9%		10	98.7%
	WI	866	210,842	28	2,716	894	213,558	38	95.7%		10	98.9%
NTNCWS Total		**4,490**	**1,182,603**	**212**	**39,937**	4,702	1,222,540	**210**	95.5%		**112**	97.6%
TNCWS	05	7	456			7						
	IL	3,423	343,838	184	12,179	3,607						
	IN	2,825	384,523	118	10,272	2,943						
	MI	8,504	1,009,965	554	54,663	9,058						
	MN	5,663	530,871	150	12,778	5,813						
	OH	2,925	409,616	116	14,288	3,041						
	WI	9,495	717,932	176	10,367	9,671						
TNCWS Total		**32,842**	**3,397,201**	**1,298**	**114,547**	34,140						
Grand Total		**44,647**	**47,980,829**	**1,568**	**166,804**	46,215						

Attachment 2

SQL Query (For FY2010, I forgot to exclude the Type 53 and 56 violations which are not "major/significant". In addition, we may want to exclude the Type 66.)

```
SELECT DISTINCT dbo_DIM_PWS.PWSID, dbo_DIM_PWS.PWSName, dbo_DIM_PWS.State, dbo_DIM_PWS.Status,
dbo_DIM_PWS.PWSType, dbo_DIM_PWS.SizeCat5_pt, dbo_DIM_PWS.RetPopSrvd, dbo_DIM_VCode.Vtype4_pt, dbo_FACT_Violation.VCode,
dbo_FACT_Violation.VioID, dbo_FACT_Violation.CCode, dbo_DIM_CType.CType_pt, dbo_FACT_Violation.ComplPerBeginDate,
dbo_FACT_Violation.ComplPerEndDate, dbo_FACT_Violation.MajorViolInd
FROM ((dbo_DIM_PWS INNER JOIN dbo_FACT_Violation ON dbo_DIM_PWS.PWSID = dbo_FACT_Violation.PWSID) INNER JOIN
dbo_DIM_VCode ON dbo_FACT_Violation.VCode = dbo_DIM_VCode.VCode) INNER JOIN dbo_DIM_CType ON
dbo_FACT_Violation.CType_id = dbo_DIM_CType.CType_id
WHERE (((dbo_DIM_VCode.Vtype4_pt)="c_MR") AND ((dbo_FACT_Violation.VCode)<>24 And (dbo_FACT_Violation.VCode)<>26 And
(dbo_FACT_Violation.VCode)<>53 And (dbo_FACT_Violation.VCode)<>56) AND ((dbo_FACT_Violation.ComplPerBeginDate)<=#12/31/2010#)
AND ((dbo_FACT_Violation.ComplPerEndDate)>=#1/1/2010#) AND ((dbo_FACT_Violation.MajorViolInd) Is Null) AND
((dbo_DIM_PWS.EPA_Region)="05")) OR (((dbo_DIM_VCode.Vtype4_pt)="c_MR") AND
((dbo_FACT_Violation.ComplPerBeginDate)<=#12/31/2010#) AND ((dbo_FACT_Violation.ComplPerEndDate)>=#1/1/2010#) AND
((dbo_FACT_Violation.MajorViolInd)="Y") AND ((dbo_DIM_PWS.EPA_Region)="05"));
```